GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: August 23, 2004, 10:56:47 ; Search time 89 Seconds
(without alignments)
25.398 Million cell updates/sec

Title: VARIANT1
Perfect score: 25
Sequence: 1 XQXXVXHL 8

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 200 summaries

Database : A_Geneseq_29Jan04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	25	100.0	8	2	AAR04531	Aar04531 Non-cycli
2	25	100.0	8	2	AAR11224	Aar11224 Linear li
3	25	100.0	8	2	AAR11241	Aar11241 Linear li
4	25	100.0	8	2	AAR11240	Aar11240 Linear li
5	25	100.0	8	2	AAR11242	Aar11242 Linear li
6	25	100.0	8	2	AAR14877	Aar14877 Peptide a
7	25	100.0	8	2	AAR29157	Aar29157 Bombesin
8	25	100.0	8	2	AAR29155	Aar29155 Bombesin
9	25	100.0	8	2	AAW64910	Aaw64910 Bombesin
10	25	100.0	8	2	AAW64911	Aaw64911 Bombesin
11	25	100.0	8	2	AAW50941	Aaw50941 Bombesin
12	25	100.0	8	2	AAW92740	Aaw92740 Bombesin
13	25	100.0	8	3	AAB08307	Aab08307 Amino aci
14	25	100.0	8	3	AAB08308	Aab08308 Amino aci
15	25	100.0	8	3	AAB08302	Aab08302 Amino aci
16	25	100.0	8	4	AAB91910	Aab91910 Bombesin
17	25	100.0	8	4	AAE10469	Aae10469 Synthetic
18	25	100.0	8	4	AAE10465	Aae10465 Synthetic
19	25	100.0	8	4	AAE10468	Aae10468 Synthetic
20	25	100.0	8	4	AAE10470	Aae10470 Synthetic
21	25	100.0	8	4	AAE10463	Aae10463 Synthetic
22	25	100.0	8	4	AAE10471	Aae10471 Synthetic
23	25	100.0	8	4	AAE10464	Aae10464 Synthetic
24	25	100.0	8	4	AAE10472	Aae10472 Synthetic
25	25	100.0	8	5	ABB06687	Abb06687 Bombesin/
26	25	100.0	8	5	ABB06690	Abb06690 Bombesin/
27	25	100.0	8	5	ABB06688	Abb06688 Bombesin/
28	25	100.0	8	5	ABB06670	Abb06670 Bombesin/
29	25	100.0	8	5	ABB06689	Abb06689 Bombesin/
30	25	100.0	8	6	ABP72336	Abp72336 Bombesin
31	25	100.0	8	7	ABU08880	Abu08880 Antiangio
32	25	100.0	8	7	ABU08879	Abu08879 Antiangio
33	25	100.0	8	7	ADD70039	Add70039 Bombesin/
34	25	100.0	8	7	ADD70038	Add70038 Bombesin/
35	25	100.0	8	7	ADD70033	Add70033 Bombesin/
36	25	100.0	8	7	ADD70007	Add70007 Bombesin/
37	25	100.0	8	7	ADD70003	Add70003 Bombesin/
38	25	100.0	8	7	ADD70014	Add70014 Bombesin/
39	25	100.0	8	7	ADD70031	Add70031 Bombesin/
40	25	100.0	8	7	ADD70017	Add70017 Bombesin/
41	25	100.0	8	7	ADD70018	Add70018 Bombesin/
42	25	100.0	8	7	ADD70006	Add70006 Bombesin/
43	25	100.0	8	7	ADD70013	Add70013 Bombesin/
44	25	100.0	8	7	ADD70015	Add70015 Bombesin/
45	25	100.0	8	7	ADD70012	Add70012 Bombesin/
46	25	100.0	9	2	AAR09335	Aar09335 Sequence
47	25	100.0	9	2	AAR04527	Aar04527 Non-cycli
48	25	100.0	9	2	AAR04530	Aar04530 Non-cycli
49	25	100.0	9	2	AAR04526	Aar04526 Non-cycli
50	25	100.0	9	2	AAR04528	Aar04528 Non-cycli
51	25	100.0	9	2	AAR04529	Aar04529 Non-cycli
52	25	100.0	9	2	AAR08345	Aar08345 Peptide b
53	25	100.0	9	2	AAR12033	Aar12033 Bombesin
54	25	100.0	9	2	AAR14866	Aar14866 Peptide a
55	25	100.0	9	2	AAR14867	Aar14867 Peptide a
56	25	100.0	9	2	AAR14876	Aar14876 Peptide a
57	25	100.0	9	2	AAR14860	Aar14860 Peptide a
58	25	100.0	9	2	AAR14865	Aar14865 Peptide a
59	25	100.0	9	2	AAR14863	Aar14863 Peptide a
60	25	100.0	9	2	AAR14864	Aar14864 Peptide a
61	25	100.0	9	2	AAR14862	Aar14862 Peptide a
62	25	100.0	9	2	AAR14880	Aar14880 Cyclic an
63	25	100.0	9	2	AAR14872	Aar14872 Peptide a
64	25	100.0	9	2	AAR15038	Aar15038 Cyclic an
65	25	100.0	9	2	AAR14861	Aar14861 Peptide a
66	25	100.0	9	2	AAR14873	Aar14873 Peptide a
67	25	100.0	9	2	AAR11521	Aar11521 Example o
68	25	100.0	9	2	AAR11522	Aar11522 Example o
69	25	100.0	9	2	AAR11529	Aar11529 Example o
70	25	100.0	9	2	AAR11525	Aar11525 Example o
71	25	100.0	9	2	AAR11520	Aar11520 Example o
72	25	100.0	9	2	AAR24488	Aar24488 [psi8-9 p
73	25	100.0	9	2	AAR24489	Aar24489 [psi8-9 p
74	25	100.0	9	2	AAR28447	Aar28447 [psi8-9 p
75	25	100.0	9	2	AAR28462	Aar28462 [psi8-9 p
76	25	100.0	9	2	AAR28458	Aar28458 [psi8-9 p
77	25	100.0	9	2	AAR24491	Aar24491 [psi8-9 p
78	25	100.0	9	2	AAR28448	Aar28448 [psi8-9 p
79	25	100.0	9	2	AAR24490	Aar24490 [psi8-9 p
80	25	100.0	9	2	AAR28460	Aar28460 [psi8-9 p
81	25	100.0	9	2	AAR24486	Aar24486 [psi8-9 p
82	25	100.0	9	2	AAR24492	Aar24492 [psi8-9 p
83	25	100.0	9	2	AAR28673	Aar28673 [psi8-9 p
84	25	100.0	9	2	AAR24483	Aar24483 [psi8-9 p
85	25	100.0	9	2	AAR24493	Aar24493 [psi8-9 p
86	25	100.0	9	2	AAR28461	Aar28461 [psi8-9 p
87	25	100.0	9	2	AAR28674	Aar28674 [psi8-9 p
88	25	100.0	9	2	AAR28450	Aar28450 [psi8-9 p
89	25	100.0	9	2	AAR28454	Aar28454 [psi8-9 p
90	25	100.0	9	2	AAR28463	Aar28463 [psi8-9 p
91	25	100.0	9	2	AAR24487	Aar24487 [psi8-9 p
92	25	100.0	9	2	AAR24484	Aar24484 [psi8-9 p
93	25	100.0	9	2	AAR29152	Aar29152 Bombesin
94	25	100.0	9	2	AAR29151	Aar29151 Bombesin
95	25	100.0	9	2	AAR29154	Aar29154 Bombesin
96	25	100.0	9	2	AAR29153	Aar29153 Bombesin
97	25	100.0	9	2	AAR43757	Aar43757 MHC Class
98	25	100.0	9	2	AAR40901	Aar40901 Bombesin

99	25	100.0	9	2	AAR40902	Aar40902 Bombesin
100	25	100.0	9	2	AAR40903	Aar40903 Bombesin
101	25	100.0	9	2	AAR40907	Aar40907 Bombesin
102	25	100.0	9	2	AAR40900	Aar40900 Bombesin
103	25	100.0	9	2	AAR40905	Aar40905 Bombesin
104	25	100.0	9	2	AAR40906	Aar40906 Bombesin
105	25	100.0	9	2	AAR59105	Aar59105 Peptide f
106	25	100.0	9	2	AAR69367	Aar69367 Bombesin
107	25	100.0	9	2	AAR69366	Aar69366 Bombesin
108	25	100.0	9	2	AAR69369	Aar69369 Bombesin
109	25	100.0	9	2	AAR69365	Aar69365 Bombesin
110	25	100.0	9	2	AAR69368	Aar69368 Bombesin
111	25	100.0	9	2	AAR47619	Aar47619 Bombesin-
112	25	100.0	9	2	AAR69564	Aar69564 [D-Tpi6,
113	25	100.0	9	2	AAY01936	Aay01936 Peptide a
114	25	100.0	9	2	AAW00310	Aaw00310 Bombesin
115	25	100.0	9	2	AAW00307	Aaw00307 Bombesin
116	25	100.0	9	2	AAW39675	Aaw39675 HPV18 E7
117	25	100.0	9	2	AAW51201	Aaw51201 Peptide d
118	25	100.0	9	2	AAW51206	Aaw51206 Peptide d
119	25	100.0	9	2	AAW51195	Aaw51195 Peptide d
120	25	100.0	9	2	AAW51193	Aaw51193 Peptide d
121	25	100.0	9	2	AAW51200	Aaw51200 Peptide d
122	25	100.0	9	2	AAW51207	Aaw51207 Peptide d
123	25	100.0	9	2	AAW51212	Aaw51212 Litorin (
124	25	100.0	9	2	AAW51209	Aaw51209 Peptide d
125	25	100.0	9	2	AAW51194	Aaw51194 Peptide d
126	25	100.0	9	2	AAW54742	Aaw54742 Peptide f
127	25	100.0	9	2	AAY17045	Aay17045 HPV antig
128	25	100.0	9	2	AAW92738	Aaw92738 Bombesin
129	25	100.0	9	3	AAY44955	Aay44955 Human pap
130	25	100.0	9	4	AAB96028	Aab96028 HPV 18 E7
131	25	100.0	9	5	ABB06668	Abb06668 Bombesin/
132	25	100.0	9	7	ADD70041	Add70041 Bombesin/
133	25	100.0	9	7	ADD70005	Add70005 Bombesin/
134	25	100.0	9	7	ADD70008	Add70008 Bombesin/
135	25	100.0	9	7	ADD70028	Add70028 Bombesin/
136	25	100.0	9	7	ADD70011	Add70011 Bombesin/
137	25	100.0	9	7	ADD70023	Add70023 Bombesin/
138	25	100.0	9	7	ADD70010	Add70010 Bombesin/
139	25	100.0	9	7	ADD70032	Add70032 Bombesin/
140	25	100.0	9	7	ADD70021	Add70021 Bombesin/
141	25	100.0	9	7	ADD70029	Add70029 Bombesin/
142	25	100.0	10	1	AAP96113	Aap96113 Sequence
143	25	100.0	10	2	AAR04533	Aar04533 Non-cycli
144	25	100.0	10	2	AAW50618	Aaw50618 Bombesin
145	25	100.0	10	4	AAB96029	Aab96029 HPV 18 E7
146	25	100.0	10	5	ABB06675	Abb06675 Amphibian
147	25	100.0	10	7	ADD70036	Add70036 Therapeut
148	25	100.0	11	3	AAY82106	Aay82106 Bombesin
149	25	100.0	11	4	AAB19953	Aab19953 Bombesin
150	25	100.0	11	4	AAB19954	Aab19954 Bombesin
151	25	100.0	11	4	AAB69152	Aab69152 Bombesin
152	25	100.0	11	4	AAB69153	Aab69153 Bombesin
153	25	100.0	11	4	AAB71697	Aab71697 Bombesin
154	25	100.0	11	4	AAB71698	Aab71698 Bombesin
155	25	100.0	11	4	AAB70512	Aab70512 Bombesin
156	25	100.0	11	4	AAB70511	Aab70511 Bombesin
157	25	100.0	11	4	AAB73422	Aab73422 Bombesin
158	25	100.0	11	4	AAB73423	Aab73423 Bombesin
159	25	100.0	11	4	AAU07321	Aau07321 Bombesin
160	25	100.0	11	4	AAU07320	Aau07320 Bombesin
161	25	100.0	11	4	AAG67682	Aag67682 Amino aci
162	25	100.0	11	4	AAG67681	Aag67681 Amino aci
163	25	100.0	11	4	AAE07134	Aae07134 Bombesin
164	25	100.0	11	4	AAE07135	Aae07135 Bombesin
165	25	100.0	11	4	AAB73428	Aab73428 Bombesin
166	25	100.0	11	4	AAB73429	Aab73429 Bombesin
167	25	100.0	11	4	AAG65285	Aag65285 Bombesin
168	25	100.0	11	4	AAG65284	Aag65284 Bombesin
169	25	100.0	11	5	AAU97454	Aau97454 Synthetic
170	25	100.0	11	5	AAU97455	Aau97455 Synthetic
171	25	100.0	11	6	ABU09468	Abu09468 Bombesin
172	25	100.0	11	6	ABU09467	Abu09467 Bombesin
173	25	100.0	11	6	ABR42465	Abr42465 Bombesin
174	25	100.0	11	6	ABR42464	Abr42464 Bombesin
175	25	100.0	11	6	ABR55703	Abr55703 Bombesin
176	25	100.0	11	6	ABR55704	Abr55704 Bombesin
177	25	100.0	11	6	ABR44098	Abr44098 Amino aci
178	25	100.0	11	6	ABR44099	Abr44099 Amino aci
179	25	100.0	11	7	ABR82872	Abr82872 Amino aci
180	25	100.0	11	7	ABR82871	Abr82871 Amino aci
181	25	100.0	11	7	ADD70000	Add70000 Therapeut
182	25	100.0	12	3	AAY92995	Aay92995 Transform
183	25	100.0	12	3	AAY92996	Aay92996 Transform
184	25	100.0	12	3	AAY82107	Aay82107 Bombesin
185	25	100.0	13	4	AAB91906	Aab91906 Bombesin
186	25	100.0	13	4	AAB91913	Aab91913 Bombesin
187	25	100.0	13	6	ABG72845	Abg72845 Peptide u
188	25	100.0	14	1	AAP80311	Aap80311 Sequence
189	25	100.0	14	2	AAR29587	Aar29587 [Leu13-ps
190	25	100.0	14	2	AAR47617	Aar47617 Bombesin-
191	25	100.0	14	2	AAW64900	Aaw64900 Bombesin
192	25	100.0	14	2	AAW11504	Aaw11504 Bombesin
193	25	100.0	14	2	AAW04621	Aaw04621 Bombesin
194	25	100.0	14	2	AAW50621	Aaw50621 Peptide a
195	25	100.0	14	2	AAW50965	Aaw50965 Bombesin
196	25	100.0	14	2	AAW50959	Aaw50959 Bombesin
197	25	100.0	14	2	AAW50957	Aaw50957 Bombesin
198	25	100.0	14	2	AAW52611	Aaw52611 Bombesin
199	25	100.0	14	2	AAW92732	Aaw92732 Amphibian
200	25	100.0	14	2	AAY31061	Aay31061 Non-cross

ALIGNMENTS

```
RESULT 1
AAR04531
ID   AAR04531 standard; protein; 8 AA.
XX
AC   AAR04531;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1990  (first entry)
XX
DE   Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KW   Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW   therapeutic peptides.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-phenylalanine
XX
PN   WO9003980-A.
XX
PD   19-APR-1990.
XX
PF   14-OCT-1988;   88US-00257998.
XX
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau JP,  Taylor JE,  Kim SH;
XX
DR   WPI; 1990-147822/19.
XX
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PT   New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT   amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT   carcinoma, atherosclerosis and gastrointestinal disorders.
XX
PS   Claim 21; Page 55; 68pp; English.
XX
CC   C-terminal = ethylamide or amide. The peptide has an active site and a
CC   binding site for binding to a target cell receptor, and has one of the
CC   following modifications: (a) a deletion of a residue within the active
CC   site and a modification of a residue outside of the active site; and (b)
CC   a replacement of 1 or 2 residues within the active site with a synthetic
CC   amino acid. On binding to its receptor, the analogue acts as a
CC   competitive inhibitor of the naturally occurrring peptide but due to the
CC   modifications, fails to exhibit the normal in vivo biological activity.
CC   The peptides are useful for the treatment of benign or malignant
CC   proliferation of tissues, eg cancers of the gastrointestinal tract,
CC   pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC   treatment of atherosclerosis; and disorders of the gastrointestinal
CC   tissues. This peptide is a claimed example of a highly generic formula.
CC   See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 2
AAR11224
ID   AAR11224 standard; protein; 8 AA.
XX
AC   AAR11224;
XX
DT   17-MAY-1991  (first entry)
XX
DE   Linear litorin analogue.
XX
KW   Bombesin; litorin analogue; linear; receptor affinity; cancer; diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1. .1
FT                   /label= D-p-chloro-phenylalanined
XX
PN   WO9102746-A.
XX
PD   07-MAR-1991.
XX
PF   21-AUG-1989;   89US-00397169.
XX
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) ADMIN TULANE EDUCATIONAL.
XX
PI   Coy DH,  Moreau JP,  Kim SH;
XX
DR   WPI; 1991-087241/12.
XX
PT   New linear peptide analogues of bombesin - modified to eliminate
PT   biological activity while retaining receptor affinity, for treating
PT   cancer, diabetes, etc.
XX
PS   Claim 13; Page 53; 58pp; English.
XX
CC   This peptide is a specifically claimed example of a generic formula. The
CC   C-terminal amino acid (Met) of the naturally occurring peptide has been
CC   converted to an amide and Phe 8 has been replaced by statine. The peptide
CC   is useful for treating benign or malignant tissue proliferation,
CC   artherosclerosis, gastrointestinal disorders and diabetes. They act as
CC   competitive inhibitors of natural peptides, since they bind to the cell
CC   receptors but have no biological activity
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 3
AAR11241
ID   AAR11241 standard; protein; 8 AA.
XX
AC   AAR11241;
XX
DT   17-MAY-1991  (first entry)
XX
DE   Linear litorin analogue (III).
XX
KW   Bombesin; litorin analogue; linear; receptor affinity; cancer; diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1. .1
FT                   /label= D-p-chloro-phenylalanine
XX
PN   WO9102746-A.
XX
PD   07-MAR-1991.
XX
PF   21-AUG-1989;   89US-00397169.
XX
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) ADMIN TULANE EDUCATIONAL.
XX
PI   Coy DH,  Moreau JP,  Kim SH;
XX
DR   WPI; 1991-087241/12.
XX
PT   New linear peptide analogues of bombesin - modified to eliminate
PT   biological activity while retaining receptor affinity, for treating
PT   cancer, diabetes, etc.
XX
PS   Claim 18; Page 54; 58pp; English.
XX
CC   This peptide is a specifically claimed example of a generic formula. The
CC   C-terminal amino acid (Met) of the naturally occurring peptide has been
CC   converted to an amide and Phe 8 has been replaced by beta-Leu. Gly 6 has
CC   also been replaced by D-Ala. The peptide is useful for treating benign or
CC   malignant tissue proliferation, artherosclerosis, gastrointestinal
CC   disorders and diabetes. They act as competitive inhibitors of natural
CC   peptides, since they bind to the cell receptors but have no biological
CC   activity. The analogue may also be of a naturally occurring peptide
CC   terminating at the C-terminus with a Met residue, such as the 10 amino
CC   acid C-terminal region of mammalian GRP or amphibian bombesin. See also
CC   AAR11239-242
XX
SQ   Sequence 8 AA;
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  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVAHL 8


RESULT 4
AAR11240
ID   AAR11240 standard; protein; 8 AA.
XX
AC   AAR11240;
XX
DT   17-MAY-1991  (first entry)
XX
DE   Linear litorin analogue (II).
XX
KW   Bombesin; litorin analogue; linear; receptor affinity; cancer; diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1. .1
FT                   /label= D-p-chloro-phenylalanine
XX
PN   WO9102746-A.
XX
PD   07-MAR-1991.
XX
PF   21-AUG-1989;   89US-00397169.
XX
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) ADMIN TULANE EDUCATIONAL.
XX
PI   Coy DH,  Moreau JP,  Kim SH;
XX
DR   WPI; 1991-087241/12.
XX
PT   New linear peptide analogues of bombesin - modified to eliminate
PT   biological activity while retaining receptor affinity, for treating
PT   cancer, diabetes, etc.
XX
PS   Claim 17; Page 53; 58pp; English.
XX
CC   This peptide is a specifically claimed example of a generic formula. The
CC   C-terminal amino acid (Met) of the naturally occurring peptide has been
CC   converted to an amide and Phe 8 has been replaced by beta-Leu. The
CC   peptide is useful for treating benign or malignant tissue proliferation,
CC   artherosclerosis, gastrointestinal disorders and diabetes. They act as
CC   competitive inhibitors of natural peptides, since they bind to the cell
CC   receptors but have no biological activity. The analogue may also be of a
CC   naturally occurring peptide terminating at the C-terminus with a Met
CC   residue, such as the 10 amino acid C-terminal region of mammalian GRP or
CC   amphibian bombesin. See also AAR11239-242
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 5
AAR11242
ID   AAR11242 standard; protein; 8 AA.
XX
AC   AAR11242;
XX
DT   17-MAY-1991  (first entry)
XX
DE   Linear litorin analogue (IV).
XX
KW   Bombesin; litorin analogue; linear; receptor affinity; cancer; diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1. .1
FT                   /label= D-Phe, pentafluoro-Phe
FT   Modified-site   6. .6
FT                   /label= N-methyl-D-Ala
XX
PN   WO9102746-A.
XX
PD   07-MAR-1991.
XX
PF   21-AUG-1989;   89US-00397169.
XX
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) ADMIN TULANE EDUCATIONAL.
XX
PI   Coy DH,  Moreau JP,  Kim SH;
XX
DR   WPI; 1991-087241/12.
XX
PT   New linear peptide analogues of bombesin - modified to eliminate
PT   biological activity while retaining receptor affinity, for treating
PT   cancer, diabetes, etc.
XX
PS   Claim 20+21; Page 54; 58pp; English.
XX
CC   These peptides are specifically claimed examples of a generic formula.
CC   The C-terminal amino acid (Met) of the naturally occurring peptide has
CC   been converted to a methylester. The peptide is useful for treating
CC   benign or malignant tissue proliferation, artherosclerosis,
CC   gastrointestinal disorders and diabetes. They act as competitive
CC   inhibitors of natural peptides, since they bind to the cell receptors but
CC   have no biological activity. The analogue may also be of a naturally
CC   occurring peptide terminating at the C-terminus with a Met residue, such
CC   as the 10 amino acid C-terminal region of mammalian GRP or amphibian
CC   bombesin. See also AAR11239-242
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 6
AAR14877
ID   AAR14877 standard; protein; 8 AA.
XX
AC   AAR14877;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #18 of litorin, GRP, neuromedin or bombesin.
```

```
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
FT   Modified-site   8
FT                   /label= OTHER
FT                   /note= "Leu-propylamide"
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 20; Page 19; 25pp; English.
XX
CC   This peptide is one of 27 specific examples of a highly generic formula.
CC   The peptides are all analogues of either litorin; the 10 amino acid C-
CC   terminal region of mammalian GRP, neuromedin B or neuromedin C; or the 10
CC   amino acid C-terminal region of amphibian bombesin. They act as at least
CC   partial agonists of the natural peptides. The peptide analogues are made
CC   by standard methods of synthesis and can be cyclised. See AAR14860-R14880
CC   and AAR15035-R15040. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 7
AAR29157
ID   AAR29157 standard; peptide; 8 AA.
XX
AC   AAR29157;
XX
DT   25-MAR-2003  (revised)
DT   16-APR-1993  (first entry)
XX
DE   Bombesin analogue (6).
XX
KW   Hepatoma; liver cancer; antagonist.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-F5-Phe"
FT   Misc-difference 6
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "Leu-OMe"
XX
PN   WO9220363-A1.
XX
PD   26-NOV-1992.
XX
PF   11-MAY-1992;   92WO-US003916.
XX
PR   10-MAY-1991;   91US-00698681.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Bodgen AE,  Coy DH,  Kim SH,  Moreau J;
XX
DR   WPI; 1992-415466/50.
XX
PT   Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT   carrier.
XX
PS   Claim 15; Page 48; 54pp; English.
XX
CC   The peptide is an example of a highly generic formula. It is used in a
CC   medicament for treating hepatoma. The cpd. acts as antagonist to
CC   bombesin, which has been detected in a number of human cancer lines.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 8
AAR29155
ID   AAR29155 standard; peptide; 8 AA.
XX
AC   AAR29155;
XX
DT   25-MAR-2003  (revised)
DT   16-APR-1993  (first entry)
XX
DE   Bombesin analogue (5).
XX
KW   Hepatoma; liver cancer; antagonist.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /note= "NMe-D-Ala"
FT   Modified-site   8
FT                   /note= "Leu-OMe"
XX
PN   WO9220363-A1.
XX
PD   26-NOV-1992.
XX
PF   11-MAY-1992;   92WO-US003916.
XX
PR   10-MAY-1991;   91US-00698681.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Bodgen AE,  Coy DH,  Kim SH,  Moreau J;
```

```
XX
DR   WPI; 1992-415466/50.
XX
PT   Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT   carrier.
XX
PS   Claim 14; Page 48; 54pp; English.
XX
CC   The peptide is an example of a highly generic formula. It is used in a
CC   medicament for treating hepatoma. The cpd. acts as antagonist to
CC   bombesin, which has been detected in a number of human cancer lines.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 9
AAW64910
ID   AAW64910 standard; peptide; 8 AA.
XX
AC   AAW64910;
XX
DT   06-JUL-1999  (first entry)
XX
DE   Bombesin receptor antagonist.
XX
KW   Bombesin; antagonist; chlorambucil; peptic ulcer; pancreatitis;
KW   eating disorder; diabetes; acromegaly; enterocutaneous fistula;
KW   psoriasis; growth retardation; gastrointestinal motility disorder;
KW   antitumour.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "The amino terminal is acylated with acetyl,
FT                   bromoacetyl, chloroacetyl, [bis(2-chloroethyl)-amino]- L-
FT                   phenylalanine or a chlorambucil group"
FT   Modified-site   8
FT                   /note= "The carboxy terminal is in the form of an ethyl
FT                   ester"
XX
PN   WO9500542-A1.
XX
PD   05-JAN-1995.
XX
PF   15-JUN-1994;   94WO-US006757.
XX
PR   18-JUN-1993;   93US-00078062.
PR   17-DEC-1993;   93US-00168390.
XX
PA   (PEPT-) PEPTIDE TECHNOLOGIES CORP.
XX
PI   Knight M,  Takahashi K,  Chandrasekhar B;
XX
DR   WPI; 1995-052004/07.
XX
PT   New bombesin, gastrin releasing peptide or Neuromedin B or C derivs. -
PT   antagonists for treating conditions such as gastrointestinal disorders,
PT   psoriasis and cancers.
XX
PS   Claim 6; Page 34; 45pp; English.
XX
CC   The patent discloses (1) the peptide sequence of bombesin (BBN), gastrin
CC   releasing peptide (GRP), Neuromedin B or Neuromedin C, the peptide
CC   sequence having a chlorambucil group attached to the amino terminal; (2)
CC   a BBN receptor antagonist of formula R4-His-Trp-Ala-R1-R2-His-R3-CO-
CC   CH2CH3; and (3) a BBN receptor antagonist of formula R4-Asn-R5-Trp-Ala-
CC   Val-R2-His-Leu-CO-CH2CH3. In these formulae, R1 = Val or Thr; R2 = Gly or
CC   D-Ala; R3 = Leu or Phe; R4 = N-acetyl, bromoacetyl, chloroacetyl, [bis(2-
CC   chloroethyl)- amino]-L-phenylalanine or a chlorambucil group; and R5 =
CC   Gln or His. The compounds act as potent BBN/GRP-like peptide antagonists.
CC   They can be used to inhibit the growth of cells that are sensitive to the
CC   growth-promoting effects of BBN, GRP or a related peptide such as
CC   pancreatic cells, gastric cells, neurons, hypothalamic cells and
CC   cancerous cells or tumours. They can also be used to inhibit the binding
CC   of BBN, GRP or a related peptide to cells capable of such binding. They
CC   can be used for treating e.g. peptic ulcer, pancreatitis, eating
CC   disorders, diabetes, acromegaly, enterocutaneous fistula, psoriasis,
CC   growth retardation, gastrointestinal motility disorders or tumours. The
CC   terminal structures of the compounds protect them from in vivo
CC   proteolysis and provide highly potent antagonist effects that persist for
CC   extended periods of time upon administration
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 NQWAVGHL 8


RESULT 10
AAW64911
ID   AAW64911 standard; peptide; 8 AA.
XX
AC   AAW64911;
XX
DT   06-JUL-1999  (first entry)
XX
DE   Bombesin receptor antagonist.
XX
KW   Bombesin; antagonist; chlorambucil; peptic ulcer; pancreatitis;
KW   eating disorder; diabetes; acromegaly; enterocutaneous fistula;
KW   psoriasis; growth retardation; gastrointestinal motility disorder;
KW   antitumour.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "The amino terminal is acylated with acetyl,
FT                   bromoacetyl, chloroacetyl, [bis(2-chloroethyl)-amino]- L-
FT                   phenylalanine or a chlorambucil group"
FT   Modified-site   8
FT                   /note= "The carboxy terminal is in the form of an ethyl
FT                   ester"
XX
PN   WO9500542-A1.
XX
PD   05-JAN-1995.
XX
PF   15-JUN-1994;   94WO-US006757.
XX
PR   18-JUN-1993;   93US-00078062.
PR   17-DEC-1993;   93US-00168390.
XX
PA   (PEPT-) PEPTIDE TECHNOLOGIES CORP.
XX
PI   Knight M,  Takahashi K,  Chandrasekhar B;
XX
DR   WPI; 1995-052004/07.
XX
PT   New bombesin, gastrin releasing peptide or Neuromedin B or C derivs. -
PT   antagonists for treating conditions such as gastrointestinal disorders,
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PT   psoriasis and cancers.
XX
PS   Claim 6; Page 34; 45pp; English.
XX
CC   The patent discloses (1) the peptide sequence of bombesin (BBN), gastrin
CC   releasing peptide (GRP), Neuromedin B or Neuromedin C, the peptide
CC   sequence having a chlorambucil group attached to the amino terminal; (2)
CC   a BBN receptor antagonist of formula R4-His-Trp-Ala-R1-R2-His-R3-CO-
CC   CH2CH3; and (3) a BBN receptor antagonist of formula R4-Asn-R5-Trp-Ala-
CC   Val-R2-His-Leu-CO-CH2CH3. In these formulae, R1 = Val or Thr; R2 = Gly or
CC   D-Ala; R3 = Leu or Phe; R4 = N-acetyl, bromoacetyl, chloroacetyl, [bis(2-
CC   chloroethyl)- amino]-L-phenylalanine or a chlorambucil group; and R5 =
CC   Gln or His. The compounds act as potent BBN/GRP-like peptide antagonists.
CC   They can be used to inhibit the growth of cells that are sensitive to the
CC   growth-promoting effects of BBN, GRP or a related peptide such as
CC   pancreatic cells, gastric cells, neurons, hypothalamic cells and
CC   cancerous cells or tumours. They can also be used to inhibit the binding
CC   of BBN, GRP or a related peptide to cells capable of such binding. They
CC   can be used for treating e.g. peptic ulcer, pancreatitis, eating
CC   disorders, diabetes, acromegaly, enterocutaneous fistula, psoriasis,
CC   growth retardation, gastrointestinal motility disorders or tumours. The
CC   terminal structures of the compounds protect them from in vivo
CC   proteolysis and provide highly potent antagonist effects that persist for
CC   extended periods of time upon administration
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 NQWAVAHL 8


RESULT 11
AAW50941
ID   AAW50941 standard; peptide; 8 AA.
XX
AC   AAW50941;
XX
DT   31-JUL-1998  (first entry)
XX
DE   Bombesin antagonist (BOM1).
XX
KW   Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
KW   Substance P; cancer; inhibition.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "Leu-NHEt"
XX
PN   EP835662-A2.
XX
PD   15-APR-1998.
XX
PF   11-DEC-1996;   96EP-00309012.
XX
PR   08-OCT-1996;   96US-00727679.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
XX
PI   Mukherjee R,  Jaggi M;
XX
DR   WPI; 1998-208959/19.
XX
PT   Composition containing analogues of vasoactive intestinal peptide,
PT   somatostatin - bombesin and substance P, for treatment of tumours and for
PT   inhibiting over-expression of these peptide(s).
XX
PS   Claim 1; Page 4; 49pp; English.
XX
CC   The invention relates to a new composition which comprises: (i) the
CC   somatostatin analogue SOM2 AGCKNFFdWKTPTSdC (3-14 disulphide bridge), and
CC   (ii) at least 4 of the peptides: antagonist of vasoactive intestinal
CC   peptide (VIP1); VIP receptor-binding inhibitor (VIP2); VIP receptor
CC   antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
CC   (BOM1) and substance P antagonist (SP1). Also claimed are more general
CC   compositions containing peptide analogues of somatostatin, VIP, bombesin
CC   and substance P. The compositions are used in human or veterinary
CC   medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
CC   cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
CC   of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
CC   particularly rectum and colon, and (b) to prevent, inhibit or modulate
CC   over-expression of, e.g. VIP. A wide range of cancer cells express
CC   receptors for VIP, somatostatin, bombesin and/or substance P. The present
CC   sequence represents bombesin antagonist (BOM1)
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 12
AAW92740
ID   AAW92740 standard; peptide; 8 AA.
XX
AC   AAW92740;
XX
DT   20-MAR-2003  (revised)
DT   30-APR-1999  (first entry)
XX
DE   Bombesin peptide analogue #6.
XX
KW   Bombesin; gastrin releasing peptide; GRP; GRF; litorin; proliferation;
KW   growth hormone releasing factor; treatment; benign; malignant; tissue;
KW   small-cell lung carcinoma; atherosclerosis; gastrointestinal disorder;
KW   diabetes; diabetes related retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Residue is pyroglutamate"
FT   Modified-site   8
FT                   /note= "methylester C-terminus"
XX
PN   US5877277-A.
XX
PD   02-MAR-1999.
XX
PF   10-NOV-1994;   94US-00337127.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
```

```
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Kim SH,  Coy DH,  Moreau J;
XX
DR   WPI; 1999-189718/16.
XX
PT   New peptides - useful for treating benign or malignant tissue
PT   proliferation, gastrointestinal disorders and diabetes.
XX
PS   Disclosure; Col 29-30; 22pp; English.
XX
CC   This invention describes novel peptides which are analogues of litorin or
CC   the 10 amino acid carboxy-terminal region of mammalian gastrin releasing
CC   peptide or the 10 amino acid carboxy-terminal region of amphibian
CC   bombesin of formula (R1)(R2)A1-A2-Trp-A4-A5-A6-A7-W where A1 = D-isomer
CC   of p-X-Phe, Trp or beta-Nal; X = F, Cl, Br, NO2, OH, H or Me; A2 = Gly,
CC   Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys, beta-Nal, His, 1-
CC   methyl-His or 3-methyl-His; A4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle,
CC   alpha-aminobutyric acid, Met, p-X Phe, Trp, Cys or beta-Nal; A5 = Gln,
CC   Asn, Gly, Ala, Leu, Ile, Nle, alpha-aminobutyric acid, Met, Val, p-X-Phe,
CC   Trp, Thr or beta-Nal; A6 = Sar, Gly or D-isomer of Ala, N-methyl-Ala,
CC   Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys or beta-Nal; A7 = His or
CC   1-methyl or 3-methyl-His; W = -N(R3)-CH(Z1)-R4- CH(Z2)-C(=O)V; R4 = CH2NH
CC   ; Z1, Z2 = Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe,
CC   Trp, Cys, Met, Pro, HyPro or cyclohexylAla; V = OR5 or NR6R7; R3, R5, R6,
CC   R7 = H, lower alkyl, phenyl(lower alkyl) or naphthyl(lower alkyl); R1, R2
CC   = H, 112C alkyl, 7-10C phenylalkyl or COE1; where R1 and R2 are bonded to
CC   the N-terminal amino acid of the peptide; E1 = 1-20C alkyl, 3-20C
CC   alkenyl, 3-20C alkynyl, Ph, naphthyl or 7-10C phenylalkyl; provided that
CC   when 1 of R1 and R2 is COE1, the other must be H. The peptides can be
CC   used for treating benign or malignant proliferation of tissue e.g. small-
CC   cell lung carcinoma, atherosclerosis, gastrointestinal disorders, and
CC   diabetes or diabetes related retinopathy. AAW92735-W92742 represent
CC   bombesin peptide analogues used in the method of the invention. (Updated
CC   on 20-MAR-2003 to correct PR field.)
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 13
AAB08307
ID   AAB08307 standard; peptide; 8 AA.
XX
AC   AAB08307;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Amino acid sequence of antiangiogenic peptide DT-23.
XX
KW   Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
KW   VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuJ-7; tumour growth;
KW   tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
KW   leukaemia; lymphoma.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   4
FT                   /label= Aib
FT                   /note= "alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "amidated residue"
XX
PN   WO200047221-A1.
XX
PD   17-AUG-2000.
XX
PF   11-FEB-2000; 2000WO-US003559.
XX
PR   11-FEB-1999;   99US-00248381.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2000-549083/50.
XX
PT   Novel therapeutically active composition comprising at least 5 peptides,
PT   useful for treating angiogenesis especially as a result of
PT   adenocarcinomas.
XX
PS   Claim 18; Page 36; 42pp; English.
XX
CC   AAB08304-15 represent peptides which have an antiangiogenic effect. The
CC   specification describes therapeutically active compositions comprising at
CC   least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
CC   least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
CC   VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
CC   receptor antagonist), BOM1 (a bombesin antagonist), and SP1 (a substance
CC   P antagonist). The combination of these 7 analogues is known as MuJ-7.
CC   MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
CC   by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
CC   metastasis through its antiangiogenic activity in all cancers. The
CC   peptides are useful for the treatment and prevention of angiogenesis,
CC   especially as a result of adenocarcinomas of the colon, breast, lung,
CC   prostate, kidney, leukemias or lymphomas
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|:||:||
Db          1 FQWXVGHL 8


RESULT 14
AAB08308
ID   AAB08308 standard; peptide; 8 AA.
XX
AC   AAB08308;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Amino acid sequence of antiangiogenic peptide DT-24.
XX
KW   Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
KW   VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuJ-7; tumour growth;
KW   tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
KW   leukaemia; lymphoma.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "alpha-aminoisobutyric acid"
```

```
FT   Modified-site   8
FT                   /note= "amidated residue"
XX
PN   WO200047221-A1.
XX
PD   17-AUG-2000.
XX
PF   11-FEB-2000; 2000WO-US003559.
XX
PR   11-FEB-1999;   99US-00248381.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2000-549083/50.
XX
PT   Novel therapeutically active composition comprising at least 5 peptides,
PT   useful for treating angiogenesis especially as a result of
PT   adenocarcinomas.
XX
PS   Claim 11; Page 31; 42pp; English.
XX
CC   AAB08304-15 represent peptides which have an antiangiogenic effect. The
CC   specification describes therapeutically active compositions comprising at
CC   least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
CC   least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
CC   VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
CC   receptor antagonist), BOM1 (a bombesin antagonist), and SP1 (a substance
CC   P antagonist). The combination of these 7 analogues is known as MuJ-7.
CC   MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
CC   by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
CC   metastasis through its antiangiogenic activity in all cancers. The
CC   peptides are useful for the treatment and prevention of angiogenesis,
CC   especially as a result of adenocarcinomas of the colon, breast, lung,
CC   prostate, kidney, leukemias or lymphomas
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::||||
Db          1 FQWAVXHL 8


RESULT 15
AAB08302
ID   AAB08302 standard; peptide; 8 AA.
XX
AC   AAB08302;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Amino acid sequence of bombesin analogue BOM1.
XX
KW   Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
KW   VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuJ-7; tumour growth;
KW   tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
KW   leukaemia; lymphoma.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "residue is Leu-NHEt"
XX
PN   WO200047221-A1.
XX
PD   17-AUG-2000.
XX
PF   11-FEB-2000; 2000WO-US003559.
XX
PR   11-FEB-1999;   99US-00248381.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2000-549083/50.
XX
PT   Novel therapeutically active composition comprising at least 5 peptides,
PT   useful for treating angiogenesis especially as a result of
PT   adenocarcinomas.
XX
PS   Disclosure; Page 8; 42pp; English.
XX
CC   The present sequence represents an analogue of bombesin. The
CC   specification describes therapeutically active compositions comprising at
CC   least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
CC   least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
CC   VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
CC   receptor antagonist), BOM1 (a bombesin antagonist), and SP1 (a substance
CC   P antagonist). The combination of these 7 analogues is known as MuJ-7.
CC   MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
CC   by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
CC   metastasis through its antiangiogenic activity in all cancers. The
CC   peptides are useful for the treatment and prevention of angiogenesis,
CC   especially as a result of adenocarcinomas of the colon, breast, lung,
CC   prostate, kidney, leukemias or lymphomas
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 16
AAB91910
ID   AAB91910 standard; peptide; 8 AA.
XX
AC   AAB91910;
XX
DT   22-JUN-2001  (first entry)
XX
DE   Bombesin peptide SEQ ID NO:1086.
XX
KW   Protection; endogenous therapeutic peptide; peptidase; conjugation;
KW   blood component; modification; succinimidyl; maleimido group; amino;
KW   hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200069900-A2.
XX
PD   23-NOV-2000.
XX
PF   17-MAY-2000; 2000WO-US013576.
XX
PR   17-MAY-1999;   99US-0134406P.
```

```
PR   10-SEP-1999;   99US-0153406P.
PR   15-OCT-1999;   99US-0159783P.
XX
PA   (CONJ-) CONJUCHEM INC.
XX
PI   Bridon DP,  Ezrin AM,  Milner PG,  Holmes DL,  Thibaudeau K;
XX
DR   WPI; 2001-112059/12.
XX
PT   Modifying and attaching therapeutic peptides to albumin prevents
PT   peptidase degradation, useful for increasing length of in vivo activity.
XX
PS   Disclosure; Page 550; 733pp; English.
XX
CC   The present invention describes a modified therapeutic peptide (I)
CC   comprising a therapeutically active amino acid region (III) and a
CC   reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
CC   a less therapeutically active amino acid region (IV), which covalently
CC   bonds with amino/hydroxyl/thiol groups on blood components to form a
CC   peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC   (I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC   factors and neurotransmitters, to protect them from peptidase activity in
CC   vivo for the treatment of various disorders. Endogenous therapeutic
CC   peptides are not suitable as drug candidates as they require frequent
CC   administration due to rapid degradation by peptidases in the body.
CC   Modifying and attaching therapeutic peptides to albumin prevents or
CC   reduces the action of peptidases to increase length of activity (half
CC   life) and specificity as bonding to large molecules decreases
CC   intracellular uptake and interference with physiological processes.
CC   AAB90829 to AAB92441 represent peptides which can be used in the
CC   exemplification of the present invention
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 17
AAE10469
ID   AAE10469 standard; peptide; 8 AA.
XX
AC   AAE10469;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #7 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   4
FT                   /note= "Alpha,alpha-di-ethyl glycine"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 8; Page 23; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||:||:||
Db          1 XQWXVGHL 8


RESULT 18
AAE10465
ID   AAE10465 standard; peptide; 8 AA.
XX
AC   AAE10465;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #3 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Misc-difference 3
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "Alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
```

```
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 4; Page 22; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   87.5%;  Pred. No. 1.4e+06;
  Matches    7;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              |||:||||
Db          1 XQXAVXHL 8


RESULT 19
AAE10468
ID   AAE10468 standard; peptide; 8 AA.
XX
AC   AAE10468;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #6 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Misc-difference 3
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /note= "Alpha,alpha-di-n-propylglycine"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 7; Page 23; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   87.5%;  Pred. No. 1.4e+06;
  Matches    7;  Conservative    1;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              |||:||||
Db          1 XQXAVXHL 8


RESULT 20
AAE10470
ID   AAE10470 standard; peptide; 8 AA.
XX
AC   AAE10470;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #8 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /note= "1-Aminocyclopentane carboxylic acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 9; Page 23; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
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              ||::||||
Db          1 XQWAVXHL 8


RESULT 21
AAE10463
ID   AAE10463 standard; peptide; 8 AA.
XX
AC   AAE10463;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #1 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "Alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 2; Page 22; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::||||
Db          1 XQWAVXHL 8


RESULT 22
AAE10471
ID   AAE10471 standard; peptide; 8 AA.
XX
AC   AAE10471;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #9 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "Butanoyl-D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "Alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 10; Page 23; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::||||
Db          1 XQWAVXHL 8


RESULT 23
AAE10464
ID   AAE10464 standard; peptide; 8 AA.
XX
AC   AAE10464;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #2 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
```

```
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   4
FT                   /label= Aib
FT                   /note= "Alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 3; Page 22; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||:||:||
Db          1 XQWXVGHL 8


RESULT 24
AAE10472
ID   AAE10472 standard; peptide; 8 AA.
XX
AC   AAE10472;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #10 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "Octanoyl-D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "Alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 11; Page 23; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||:||:||
Db          1 XQWAVXHL 8


RESULT 25
ABB06687
ID   ABB06687 standard; peptide; 8 AA.
XX
AC   ABB06687;
XX
DT   10-JUN-2002  (first entry)
XX
DE   Bombesin/gastrin-releasing peptide related peptide #1.
XX
KW   Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW   growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW   gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW   autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW   malignant proliferation; benign proliferation; pancreatic secretion;
KW   motility; amylase secretion suppression; appetite; muscular dystrophy;
KW   diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "C-terminally modified with ethylamide"
XX
PN   US6307017-B1.
XX
PD   23-OCT-2001.
XX
PF   02-MAR-1999;   99US-00260846.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
```

```
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2002-162970/21.
XX
PT   New antagonistic analogs of litoein and similar peptides, are useful for
PT   treating malignant or benign proliferation or gastrointestinal disorders.
XX
PS   Claim 3; Col 40; 29pp; English.
XX
CC   The present invention describes therapeutic peptides (A) or their salts
CC   of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC   having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC   mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC   cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC   ophthalmological activities and can be used as natural peptide
CC   antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC   has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
CC   cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC   incorporation of titrated thymidine into small cell lung cancer cells
CC   (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC   substance related to (A) acts as autocrine or paracrine mitotic factor,
CC   e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC   or disorders of gastric or pancreatic secretion or motility, e.g. to
CC   suppress secretion of amylase and to control appetite (particularly
CC   restoration of appetite in patients with cachexia). Antagonists of GRP
CC   also suppresses the release of growth hormone so can be used to slow down
CC   progression of muscular dystrophy and to treat diabetes (or associated
CC   retinopathy). The present sequence represents a specifically claimed
CC   example of (A) from the present invention
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 26
ABB06690
ID   ABB06690 standard; peptide; 8 AA.
XX
AC   ABB06690;
XX
DT   10-JUN-2002  (first entry)
XX
DE   Bombesin/gastrin-releasing peptide related peptide #4.
XX
KW   Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW   growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW   gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW   autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW   malignant proliferation; benign proliferation; pancreatic secretion;
KW   motility; amylase secretion suppression; appetite; muscular dystrophy;
KW   diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Cpa; D-form residue"
FT   Misc-difference 6
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "amidated beta leucine"
XX
PN   US6307017-B1.
XX
PD   23-OCT-2001.
XX
PF   02-MAR-1999;   99US-00260846.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2002-162970/21.
XX
PT   New antagonistic analogs of litoein and similar peptides, are useful for
PT   treating malignant or benign proliferation or gastrointestinal disorders.
XX
PS   Claim 8; Col 40; 29pp; English.
XX
CC   The present invention describes therapeutic peptides (A) or their salts
CC   of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC   having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC   mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC   cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC   ophthalmological activities and can be used as natural peptide
CC   antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC   has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
CC   cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC   incorporation of titrated thymidine into small cell lung cancer cells
CC   (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC   substance related to (A) acts as autocrine or paracrine mitotic factor,
CC   e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC   or disorders of gastric or pancreatic secretion or motility, e.g. to
CC   suppress secretion of amylase and to control appetite (particularly
CC   restoration of appetite in patients with cachexia). Antagonists of GRP
CC   also suppresses the release of growth hormone so can be used to slow down
CC   progression of muscular dystrophy and to treat diabetes (or associated
CC   retinopathy). The present sequence represents a specifically claimed
CC   example of (A) from the present invention
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVAHL 8
```

```
RESULT 27
ABB06688
ID   ABB06688 standard; peptide; 8 AA.
XX
AC   ABB06688;
XX
DT   10-JUN-2002  (first entry)
XX
DE   Bombesin/gastrin-releasing peptide related peptide #2.
XX
KW   Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW   growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW   gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW   autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW   malignant proliferation; benign proliferation; pancreatic secretion;
KW   motility; amylase secretion suppression; appetite; muscular dystrophy;
KW   diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Cpa; D-form residue"
FT   Modified-site   8
FT                   /note= "amidated beta leucine"
XX
PN   US6307017-B1.
XX
PD   23-OCT-2001.
XX
PF   02-MAR-1999;   99US-00260846.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2002-162970/21.
XX
PT   New antagonistic analogs of litoein and similar peptides, are useful for
PT   treating malignant or benign proliferation or gastrointestinal disorders.
XX
PS   Claim 5; Col 40; 29pp; English.
XX
CC   The present invention describes therapeutic peptides (A) or their salts
CC   of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC   having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC   mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC   cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC   ophthalmological activities and can be used as natural peptide
CC   antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC   has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
CC   cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC   incorporation of titrated thymidine into small cell lung cancer cells
CC   (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC   substance related to (A) acts as autocrine or paracrine mitotic factor,
CC   e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC   or disorders of gastric or pancreatic secretion or motility, e.g. to
CC   suppress secretion of amylase and to control appetite (particularly
CC   restoration of appetite in patients with cachexia). Antagonists of GRP
CC   also suppresses the release of growth hormone so can be used to slow down
CC   progression of muscular dystrophy and to treat diabetes (or associated
CC   retinopathy). The present sequence represents a specifically claimed
CC   example of (A) from the present invention
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 28
ABB06670
ID   ABB06670 standard; peptide; 8 AA.
XX
AC   ABB06670;
XX
DT   10-JUN-2002  (first entry)
XX
DE   Bombesin/gastrin-releasing peptide related peptide SEQ ID NO:9.
XX
KW   Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW   growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW   gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW   autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW   malignant proliferation; benign proliferation; pancreatic secretion;
KW   motility; amylase secretion suppression; appetite; muscular dystrophy;
KW   diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "pyroglutamic-acid"
FT   Modified-site   8
FT                   /note= "C-terminally modified with methylester"
XX
PN   US6307017-B1.
XX
PD   23-OCT-2001.
XX
PF   02-MAR-1999;   99US-00260846.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2002-162970/21.
XX
PT   New antagonistic analogs of litoein and similar peptides, are useful for
PT   treating malignant or benign proliferation or gastrointestinal disorders.
XX
```

```
PS   Disclosure; Col 29; 29pp; English.
XX
CC   The present invention describes therapeutic peptides (A) or their salts
CC   of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC   having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC   mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC   cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC   ophthalmological activities and can be used as natural peptide
CC   antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC   has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
CC   cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC   incorporation of titrated thymidine into small cell lung cancer cells
CC   (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC   substance related to (A) acts as autocrine or paracrine mitotic factor,
CC   e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC   or disorders of gastric or pancreatic secretion or motility, e.g. to
CC   suppress secretion of amylase and to control appetite (particularly
CC   restoration of appetite in patients with cachexia). Antagonists of GRP
CC   also suppresses the release of growth hormone so can be used to slow down
CC   progression of muscular dystrophy and to treat diabetes (or associated
CC   retinopathy). The present sequence represents a peptide which is used in
CC   the exemplification of the present invention
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 29
ABB06689
ID   ABB06689 standard; peptide; 8 AA.
XX
AC   ABB06689;
XX
DT   10-JUN-2002  (first entry)
XX
DE   Bombesin/gastrin-releasing peptide related peptide #3.
XX
KW   Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW   growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW   gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW   autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW   malignant proliferation; benign proliferation; pancreatic secretion;
KW   motility; amylase secretion suppression; appetite; muscular dystrophy;
KW   diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /note= "N-methyl-alanine; D-form residue"
FT   Modified-site   8
FT                   /note= "C-terminally modified with methylester"
XX
PN   US6307017-B1.
XX
PD   23-OCT-2001.
XX
PF   02-MAR-1999;   99US-00260846.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2002-162970/21.
XX
PT   New antagonistic analogs of litoein and similar peptides, are useful for
PT   treating malignant or benign proliferation or gastrointestinal disorders.
XX
PS   Claim 7; Col 40; 29pp; English.
XX
CC   The present invention describes therapeutic peptides (A) or their salts
CC   of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC   having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC   mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC   cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC   ophthalmological activities and can be used as natural peptide
CC   antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC   has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
CC   cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC   incorporation of titrated thymidine into small cell lung cancer cells
CC   (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC   substance related to (A) acts as autocrine or paracrine mitotic factor,
CC   e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC   or disorders of gastric or pancreatic secretion or motility, e.g. to
CC   suppress secretion of amylase and to control appetite (particularly
CC   restoration of appetite in patients with cachexia). Antagonists of GRP
CC   also suppresses the release of growth hormone so can be used to slow down
CC   progression of muscular dystrophy and to treat diabetes (or associated
CC   retinopathy). The present sequence represents a specifically claimed
CC   example of (A) from the present invention
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 30
ABP72336
ID   ABP72336 standard; peptide; 8 AA.
XX
AC   ABP72336;
XX
DT   08-MAY-2003  (first entry)
XX
DE   Bombesin antagonist.
XX
KW   Bombesin; antagonist; cancer; therapy; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Butanoyl D-phenylalanine"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "2-Aminoisobutyric acid"
```

```
XX
PN   WO2003002203-A1.
XX
PD   09-JAN-2003.
XX
PF   29-JUN-2001; 2001WO-US020775.
XX
PR   29-JUN-2001; 2001WO-US020775.
XX
PA   (DABU-) DABUR ONCOLOGY PLC.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Mukherjee R,  Prasad S,  Jaggi M,  Singh AT;
XX
DR   WPI; 2003-256290/25.
XX
PT   Composition for treatment of cancer comprises a combination of peptides.
XX
PS   Claim 1; Page 8; 34pp; English.
XX
CC   The present sequence is that of a bombesin antagonist. Bombesin is
CC   secreted by some human tumour cells and antagonists of bombesin have anti
CC   -proliferative activity on certain cancer cells. The invention provides
CC   combinations of 2, 3 or 4 peptides selected from the present peptide, the
CC   vasoactive intestinal peptide receptor binding inhibitor given in
CC   ABP72335, the substance P antagonist given in ABP72337 and the
CC   somatostatin analogue given in ABP72338 for use in the treatment of
CC   cancer. The combination of peptides modulates multiple cellular pathways
CC   implicated in cell proliferation by altering the levels of key
CC   intracellular molecules to provide a broad spectrum of anticancer
CC   activity. The peptide compositions are used in claimed methods of killing
CC   or inhibiting the multiplication of tumour cells or cancer cells in a
CC   human or animal, for inducing caspase, downregulating intracellular
CC   levels of cAMP, inhibiting secretion of vascular endothelial growth
CC   factor, downregulating levels of mitogen activated protein kinase,
CC   upregulating intracellular levels of tyrosine phosphatase, downregulating
CC   epidermal growth factor dependent proliferation, and treating cancer
CC   especially breast, ovary, colon, lung, pancreas, prostate, stomach, oral
CC   or skin fibroblasts (all claimed), cancer associated angiogenesis and
CC   metastasis
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::||||
Db          1 XQWAVXHL 8


RESULT 31
ABU08880
ID   ABU08880 standard; peptide; 8 AA.
XX
AC   ABU08880;
XX
DT   18-SEP-2003  (first entry)
XX
DE   Antiangiogenic MuJ-7 synthetic peptide, DT-24.
XX
KW   Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
KW   VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
KW   cell proliferation; autocrine; antagonist; receptor binding inhibitor;
KW   endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;
KW   lung; prostate; kidney; leukaemia; lymphoma; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "2-amino-isobutyric acid"
XX
PN   US6492330-B1.
XX
PD   10-DEC-2002.
XX
PF   11-FEB-1999;   99US-00248381.
XX
PR   16-AUG-1996;   96IN-DE001822.
PR   08-OCT-1996;   96US-00727679.
PR   11-FEB-1998;   98IN-DE000342.
PR   02-APR-1998;   98US-0080433P.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2003-531016/50.
XX
PT   An isolated peptide having specific sequence, useful for treating and/or
PT   preventing angiogenesis, or for inhibiting the proliferation or migration
PT   of tumor or cancer cells.
XX
PS   Claim 1; Col 31; 22pp; English.
XX
CC   The invention discloses an isolated peptide having a specific sequence,
CC   which can be used for treating and/or preventing angiogenesis. Also
CC   disclosed is the use of a combination of a peptides, termed MuJ-7, as an
CC   anticancer drug in restricting tumour growth by inhibiting tumour
CC   angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
CC   Substance P (SP) and Bombesin (BOM) are all secreted by at least some
CC   human tumour and cancer cells and there are binding sites for these
CC   peptides on these cells. It may be that they aid cell proliferation
CC   through an autocrine mechanism. Antagonists to these peptides (e.g. a
CC   somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
CC   a VIP receptor antagonist, a bombesin antagonist and a substance P
CC   antagonist), or a combination comprises an amount of each peptide, may be
CC   effective to inhibit the proliferation of endothelial cells, tumour or
CC   cancer cells, to inhibit migration of tumour or cancer cells or to
CC   modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
CC   cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
CC   or leukaemia or lymphoma. The sequence presented is the antiangiogenic
CC   MuJ-7 synthetic peptide, DT-24
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::||||
Db          1 FQWAVXHL 8


RESULT 32
ABU08879
ID   ABU08879 standard; peptide; 8 AA.
XX
AC   ABU08879;
XX
DT   18-SEP-2003  (first entry)
XX
DE   Antiangiogenic MuJ-7 synthetic peptide, DT-23.
XX
KW   Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
KW   VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
KW   cell proliferation; autocrine; antagonist; receptor binding inhibitor;
KW   endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;
```

```
KW   lung; prostate; kidney; leukaemia; lymphoma; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   4
FT                   /label= Aib
FT                   /note= "2-amino-isobutyric acid"
XX
PN   US6492330-B1.
XX
PD   10-DEC-2002.
XX
PF   11-FEB-1999;   99US-00248381.
XX
PR   16-AUG-1996;   96IN-DE001822.
PR   08-OCT-1996;   96US-00727679.
PR   11-FEB-1998;   98IN-DE000342.
PR   02-APR-1998;   98US-0080433P.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2003-531016/50.
XX
PT   An isolated peptide having specific sequence, useful for treating and/or
PT   preventing angiogenesis, or for inhibiting the proliferation or migration
PT   of tumor or cancer cells.
XX
PS   Claim 1; Col 31; 22pp; English.
XX
CC   The invention discloses an isolated peptide having a specific sequence,
CC   which can be used for treating and/or preventing angiogenesis. Also
CC   disclosed is the use of a combination of a peptides, termed MuJ-7, as an
CC   anticancer drug in restricting tumour growth by inhibiting tumour
CC   angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
CC   Substance P (SP) and Bombesin (BOM) are all secreted by at least some
CC   human tumour and cancer cells and there are binding sites for these
CC   peptides on these cells. It may be that they aid cell proliferation
CC   through an autocrine mechanism. Antagonists to these peptides (e.g. a
CC   somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
CC   a VIP receptor antagonist, a bombesin antagonist and a substance P
CC   antagonist), or a combination comprises an amount of each peptide, may be
CC   effective to inhibit the proliferation of endothelial cells, tumour or
CC   cancer cells, to inhibit migration of tumour or cancer cells or to
CC   modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
CC   cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
CC   or leukaemia or lymphoma. The sequence presented is the antiangiogenic
CC   MuJ-7 synthetic peptide, DT-23
XX
SQ   Sequence 8 AA;

  Query Match            100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|:||:||
Db          1 FQWXVGHL 8


RESULT 33
ADD70039
ID   ADD70039 standard; peptide; 8 AA.
XX
AC   ADD70039;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #22.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form F5 Phe"
FT   Modified-site   6
FT                   /note= "N-methyl-D-form Alanine"
FT   Modified-site   8
FT                   /note= "Leu is Leu-methylester"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 4; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match            100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 34
ADD70038
ID   ADD70038 standard; peptide; 8 AA.
XX
AC   ADD70038;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #21.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /note= "N-methyl-D-form Alanine"
FT   Modified-site   8
FT                   /note= "Leu is Leu-methylester"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Claim 7; Page 4; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRP), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 PQWAVAHL 8


RESULT 35
ADD70033
ID   ADD70033 standard; peptide; 8 AA.
XX
AC   ADD70033;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #20.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form Cpa (not defined)"
FT   Modified-site   8
FT                   /note= "Amidated Beta-Leu"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
```

```
PS   Disclosure; Page 12; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 36
ADD70007
ID   ADD70007 standard; peptide; 8 AA.
XX
AC   ADD70007;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #5.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form Cpa (not defined)"
FT   Misc-difference 6
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "Amidated Beta-leu"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Claim 8; Page 4; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVAHL 8


RESULT 37
ADD70003
ID   ADD70003 standard; peptide; 8 AA.
XX
AC   ADD70003;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #1.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   7
FT                   /note= "Leu is covalently linked to a ethylamide moiety"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
```

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PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Claim 3; Page 4; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 38
ADD70014
ID   ADD70014 standard; peptide; 8 AA.
XX
AC   ADD70014;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #8.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "N-Acetyl D-form Phene"
FT   Modified-site   8
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 5; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 39
ADD70031
ID   ADD70031 standard; peptide; 8 AA.
XX
AC   ADD70031;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #18.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
```

```
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 12; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 40
ADD70017
ID   ADD70017 standard; peptide; 8 AA.
XX
AC   ADD70017;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #11.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-F5-Phe"
FT   Misc-difference 6
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "Leu-methylester"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 6; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
```

```
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 41
ADD70018
ID   ADD70018 standard; peptide; 8 AA.
XX
AC   ADD70018;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #12.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-F5-Phe"
FT   Modified-site   6
FT                   /note= "N-Me-D-Ala"
FT   Modified-site   8
FT                   /note= "Leu-methylester"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 6; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 42
ADD70006
ID   ADD70006 standard; peptide; 8 AA.
XX
AC   ADD70006;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #4.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form Cpa (not defined)"
FT   Modified-site   8
FT                   /note= "Amidated Beta-leu"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
```

```
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Claim 5; Page 4; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 43
ADD70013
ID   ADD70013 standard; peptide; 8 AA.
XX
AC   ADD70013;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #7.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form Naphthylalanine"
FT   Modified-site   8
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 5; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 44
ADD70015
ID   ADD70015 standard; peptide; 8 AA.
XX
AC   ADD70015;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #9.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /note= "N-Me-D-Ala"
FT   Modified-site   7
FT                   /note= "His(Tos)"
FT   Modified-site   8
FT                   /note= "Leu-O-resin"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
```

```
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 5; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 45
ADD70012
ID   ADD70012 standard; peptide; 8 AA.
XX
AC   ADD70012;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #6.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 5; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 46
AAR09335
ID   AAR09335 standard; peptide; 9 AA.
XX
AC   AAR09335;
XX
DT   25-MAR-2003  (revised)
DT   31-OCT-2002  (revised)
DT   30-MAR-1992  (first entry)
```

```
XX
DE   Sequence of Bombesin receptor peptide ligand with irreversible effects.
XX
KW   Bombesin receptor; agonist; antagonist.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= H-pMel
FT                   /note= "pMel= p-bis (2-chloroethyl) amino-L-
FT                   phenylalanine"
FT   Modified-site   9
FT                   /label= Met-NH2
XX
PN   WO9001037-A.
XX
PD   08-FEB-1990.
XX
PF   19-JUL-1989;   89WO-EP000842.
XX
PR   21-JUL-1988;   88GB-00017379.
PR   28-MAR-1989;   89GB-00006900.
XX
PA   (FARM ) FARMITALIA ERBA SPA CARLO.
XX
PI   Castiglion R,  Galantino M,  Corradi F,  Gozzini L,  Ciomei M;
PI   Molinari I;
XX
DR   WPI; 1990-067161/09.
XX
PT   Bombesin receptor peptide ligands with irreversible effects - as agonists
PT   and antagonists both weak and strong.
XX
PS   Claim 2; Page 26; 32pp; English.
XX
CC   The inventors claim 36 peptides. Also claimed are: (a) pharmaceutical
CC   prepn. of a peptide of the invention; (b) prepn. of the peptides.
CC   (Updated on 31-OCT-2002 to add missing OS field.) (Updated on 25-MAR-2003
CC   to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 47
AAR04527
ID   AAR04527 standard; protein; 9 AA.
XX
AC   AAR04527;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1990  (first entry)
XX
DE   Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KW   Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW   therapeutic peptides.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-beta-naphthylalanine
FT   Modified-site   8
FT                   /label= leucine psi[CH2NH]
XX
PN   WO9003980-A.
XX
PD   19-APR-1990.
XX
PF   14-OCT-1988;   88US-00257998.
XX
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau JP,  Taylor JE,  Kim SH;
XX
DR   WPI; 1990-147822/19.
XX
PT   New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT   amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT   carcinoma, atherosclerosis and gastrointestinal disorders.
XX
PS   Claim 12; Page 52; 68pp; English.
XX
CC   C-terminal = NH2. The peptide has an active site and a binding site for
CC   binding to a target cell receptor, and has one of the following
CC   modifications: (a) a deletion of a residue within the active site and a
CC   modification of a residue outside of the active site; and (b) a
CC   replacement of 1 or 2 residues within the active site with a synthetic
CC   amino acid. On binding to its receptor, the analogue acts as a
CC   competitive inhibitor of the naturally occurrring peptide but due to the
CC   modifications, fails to exhibit the normal in vivo biological activity.
CC   The peptides are useful for the treatment of benign or malignant
CC   proliferation of tissues, eg cancers of the gastrointestinal tract,
CC   pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC   treatment of atherosclerosis; and disorders of the gastrointestinal
CC   tissues. This peptide is a claimed example of a highly generic formula.
CC   See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 AQWAVGHL 8


RESULT 48
AAR04530
ID   AAR04530 standard; protein; 9 AA.
XX
AC   AAR04530;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1990  (first entry)
XX
DE   Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KW   Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW   therapeutic peptides.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-phenylalanine
```

```
XX
PN   WO9003980-A.
XX
PD   19-APR-1990.
XX
PF   14-OCT-1988;   88US-00257998.
XX
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau JP,  Taylor JE,  Kim SH;
XX
DR   WPI; 1990-147822/19.
XX
PT   New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT   amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT   carcinoma, atherosclerosis and gastrointestinal disorders.
XX
PS   Claim 17; Page 53; 68pp; English.
XX
CC   C-terminal = methylester. The peptide has an active site and a binding
CC   site for binding to a target cell receptor, and has one of the following
CC   modifications: (a) a deletion of a residue within the active site and a
CC   modification of a residue outside of the active site; and (b) a
CC   replacement of 1 or 2 residues within the active site with a synthetic
CC   amino acid. On binding to its receptor, the analogue acts as a
CC   competitive inhibitor of the naturally occurrring peptide but due to the
CC   modifications, fails to exhibit the normal in vivo biological activity.
CC   The peptides are useful for the treatment of benign or malignant
CC   proliferation of tissues, eg cancers of the gastrointestinal tract,
CC   pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC   treatment of atherosclerosis; and disorders of the gastrointestinal
CC   tissues. This is a claimed example of a highly generic formula. See also
CC   AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.) (Updated
CC   on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to correct
CC   PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 49
AAR04526
ID   AAR04526 standard; protein; 9 AA.
XX
AC   AAR04526;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1990  (first entry)
XX
DE   Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KW   Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW   therapeutic peptides.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-p-Cl"
FT   Modified-site   8
FT                   /label= beta-homoleucine
XX
PN   WO9003980-A.
XX
PD   19-APR-1990.
XX
PF   14-OCT-1988;   88US-00257998.
XX
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau JP,  Taylor JE,  Kim SH;
XX
DR   WPI; 1990-147822/19.
XX
PT   New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT   amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT   carcinoma, atherosclerosis and gastrointestinal disorders.
XX
PS   Claim 8; Page 49; 68pp; English.
XX
CC   C-terminal = NH2. The peptide has an active site and a binding site for
CC   binding to a target cell receptor, and has one of the following
CC   modifications: (a) a deletion of a residue within the active site and a
CC   modification of a residue outside of the active site; and (b) a
CC   replacement of 1 or 2 residues within the active site with a synthetic
CC   amino acid. On binding to its receptor, the analogue acts as a
CC   competitive inhibitor of the naturally occurrring peptide but due to the
CC   modifications, fails to exhibit the normal in vivo biological activity.
CC   The peptides are useful for the treatment of benign or malignant
CC   proliferation of tissues, eg cancers of the gastrointestinal tract,
CC   pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC   treatment of atherosclerosis; and disorders of the gastrointestinal
CC   tissues. This peptide is a claimed example of a highly generic formula.
CC   See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 FQWAVGHL 9


RESULT 50
AAR04528
ID   AAR04528 standard; protein; 9 AA.
XX
AC   AAR04528;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1990  (first entry)
XX
DE   Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KW   Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW   therapeutic peptides.
XX
OS   Synthetic.
XX
```

```
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-beta-naphthylalanine
FT   Modified-site   8
FT                   /label= leucine psi[CH2NH]
XX
PN   WO9003980-A.
XX
PD   19-APR-1990.
XX
PF   14-OCT-1988;   88US-00257998.
XX
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau JP,  Taylor JE,  Kim SH;
XX
DR   WPI; 1990-147822/19.
XX
PT   New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT   amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT   carcinoma, atherosclerosis and gastrointestinal disorders.
XX
PS   Claim 13; Page 52; 68pp; English.
XX
CC   C-terminal = NH2. The peptide has an active site and a binding site for
CC   binding to a target cell receptor, and has one of the following
CC   modifications: (a) a deletion of a residue within the active site and a
CC   modification of a residue outside of the active site; and (b) a
CC   replacement of 1 or 2 residues within the active site with a synthetic
CC   amino acid. On binding to its receptor, the analogue acts as a
CC   competitive inhibitor of the naturally occurrring peptide but due to the
CC   modifications, fails to exhibit the normal in vivo biological activity.
CC   The peptides are useful for the treatment of benign or malignant
CC   proliferation of tissues, eg cancers of the gastrointestinal tract,
CC   pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC   treatment of atherosclerosis; and disorders of the gastrointestinal
CC   tissues. This peptide is a claimed example of a highly generic formula.
CC   See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 AQWAVGHL 8


RESULT 51
AAR04529
ID   AAR04529 standard; protein; 9 AA.
XX
AC   AAR04529;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1990  (first entry)
XX
DE   Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KW   Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW   therapeutic peptides.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-phenylalanine
FT   Modified-site   8
FT                   /label= leucine psi[CH2NH]
FT   Modified-site   9
FT                   /label= D-phenylalanine
XX
PN   WO9003980-A.
XX
PD   19-APR-1990.
XX
PF   14-OCT-1988;   88US-00257998.
XX
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau JP,  Taylor JE,  Kim SH;
XX
DR   WPI; 1990-147822/19.
XX
PT   New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT   amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT   carcinoma, atherosclerosis and gastrointestinal disorders.
XX
PS   Claim 15; Page 52; 68pp; English.
XX
CC   C-terminal = NH2. The peptide has an active site and a binding site for
CC   binding to a target cell receptor, and has one of the following
CC   modifications: (a) a deletion of a residue within the active site and a
CC   modification of a residue outside of the active site; and (b) a
CC   replacement of 1 or 2 residues within the active site with a synthetic
CC   amino acid. On binding to its receptor, the analogue acts as a
CC   competitive inhibitor of the naturally occurrring peptide but due to the
CC   modifications, fails to exhibit the normal in vivo biological activity.
CC   The peptides are useful for the treatment of benign or malignant
CC   proliferation of tissues, eg cancers of the gastrointestinal tract,
CC   pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC   treatment of atherosclerosis; and disorders of the gastrointestinal
CC   tissues. This peptide is a claimed example of a highly generic formula.
CC   See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 52
AAR08345
ID   AAR08345 standard; protein; 9 AA.
XX
AC   AAR08345;
XX
DT   25-MAR-2003  (revised)
DT   04-MAR-1991  (first entry)
XX
DE   Peptide bombesin antagonist.
```

```
XX
KW   Neoplasm; BBS; gastrin releasing peptide; h-GRP.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= R-Thr-
FT                   /note= "R= 4-(ClCH2CH2)2NC6H4CO-"
XX
PN   EP402852-A.
XX
PD   19-DEC-1990.
XX
PF   12-JUN-1990;    90EP-00111088.
XX
PR   15-JUN-1989;    89GB-00013844.
XX
PA   (FARM ) FARMITALIA ERBA SPA CARLO.
XX
PI   Decastigli R,  Gozzini L,  Lucietto P,  Corradi F,  Ciomei M;
PI   Molinari I;
XX
DR   WPI; 1990-377607/51.
XX
PT   New peptide bombesin antagonists - for treatment of neoplasms.
XX
PS   Example 3; Page 5; 11pp; English.
XX
CC   The peptide is a bombesin antagonist, useful in the treatment of human
CC   neoplasms. (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-
CC   MAR-2003 to correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 TQWAVGHL 8


RESULT 53
AAR12033
ID   AAR12033 standard; protein; 9 AA.
XX
AC   AAR12033;
XX
DT   25-MAR-2003  (revised)
DT   01-AUG-1991  (first entry)
XX
DE   Bombesin antagonist peptide (2).
XX
KW   Bombesin; antagonist; neuro-endocrine neoplasm; analogue.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1. .1
FT                   /label= OTHER
FT                   /note= "[bis(2-chloroethyl)amino]-L-PHE"
FT   Modified-site   7. .7
FT                   /label= His(Dnp)
XX
PN   WO9106563-A.
XX
PD   16-MAY-1991.
XX
PF   06-NOV-1989;    89GB-00025024.
XX
PR   06-NOV-1989;    89GB-00025024.
XX
PR   22-MAR-1990;    90GB-00006413.
XX
PA   (FARM ) FARMITALIA ERBA SPA CARLO.
XX
PI   Decastigli R,  Gozzini L,  Corradi F,  Ciomei M,  Molinari I;
PI   Franzetti C;
XX
DR   WPI; 1991-164130/22.
XX
PT   New peptide(s) with bombesin antagonist activity - used alone or in
PT   combination with bombesin to treat neuro-endocrine neoplasms.
XX
PS   Example 1; Page 15; 37pp; English.
XX
CC   To F1 is attached Boc and the L-M amide peptide bond is replaced by
CC   (CH2NH). The peptide is prepared by condensation of appropriate amino
CC   acids or peptides. The formation of a reduced peptide bond is
CC   accomplished by condensation of an N-protected amino acid aldehyde with a
CC   C-protected amino acid or peptide in the presence of a reducing agent
CC   such as NaCNBH34. The peptide is a bombesin analogue which, due to the
CC   alkylating moiety, displays greater receptor affinity than the parent
CC   peptide and behaves as a bombesin antagonist. As a result of the presence
CC   of a reduced peptide bond, the water solubility and antagonistic
CC   properties are increased. See also AAR12032-35. (Updated on 25-MAR-2003
CC   to correct PA field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 54
AAR14866
ID   AAR14866 standard; protein; 9 AA.
XX
AC   AAR14866;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #7 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
FT   Modified-site   6
FT                   /label= D-Ala
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;    90US-00520226.
XX
PR   09-MAY-1990;    90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
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```
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 9; Page 18; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 55
AAR14867
ID   AAR14867 standard; protein; 9 AA.
XX
AC   AAR14867;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #8 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-para-chloro-Phe"
FT   Modified-site   6
FT                   /label= D-Ala
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 10; Page 18; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 56
AAR14876
ID   AAR14876 standard; protein; 9 AA.
XX
AC   AAR14876;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #17 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-para-chloro-Phe"
FT   Modified-site   8
FT                   /label= OTHER
FT                   /note= "Leu is bonded to Phe via a [CH2NH] bond"
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 19; Page 19; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
```

```
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 57
AAR14860
ID   AAR14860 standard; peptide; 9 AA.
XX
AC   AAR14860;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #1 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "pGlu"
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 3; Page 17; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14861-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 58
AAR14865
ID   AAR14865 standard; protein; 9 AA.
XX
AC   AAR14865;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #6 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
FT   Modified-site   6
FT                   /label= D-Ala
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 8; Page 18; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 59
AAR14863
ID   AAR14863 standard; protein; 9 AA.
XX
AC   AAR14863;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #4 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
```

```
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-para-chloro-Phe"
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 6; Page 18; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 60
AAR14864
ID   AAR14864 standard; protein; 9 AA.
XX
AC   AAR14864;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #5 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-para-chloro-Phe"
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 7; Page 18; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 61
AAR14862
ID   AAR14862 standard; protein; 9 AA.
XX
AC   AAR14862;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #3 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 5; Page 18; 25pp; English.
XX
```

```
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

 Query Match             100.0%;  Score 25;  DB 2;  Length 9;
 Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
 Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 62
AAR14880
ID   AAR14880 standard; protein; 9 AA.
XX
AC   AAR14880;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Cyclic analogue #1 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 23; Page 20; 25pp; English.
XX
CC   This peptide is one of 27 specific examples of a highly generic formula.
CC   The peptides are all analogues of either litorin; the 10 amino acid C-
CC   terminal region of mammalian GRP, neuromedin B or neuromedin C; or the 10
CC   amino acid C-terminal region of amphibian bombesin. They act as at least
CC   partial agonists of the natural peptides. This peptide analogue was made
CC   by standard methods of synthesis and then cyclised. The linear form of
CC   this peptide sequence is also covered by the invention. See AAR14860-
CC   R14880 and AAR15035-R15040. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 63
AAR14872
ID   AAR14872 standard; protein; 9 AA.
XX
AC   AAR14872;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #13 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
FT   Modified-site   9
FT                   /label= Nle
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 15; Page 19; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 64
AAR15038
ID   AAR15038 standard; protein; 9 AA.
XX
```

```
AC   AAR15038;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Cyclic analogue #3 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 27; Page 20; 25pp; English.
XX
CC   This peptide is one of 27 specific examples of a highly generic formula.
CC   The peptides are all analogues of either litorin; the 10 amino acid C-
CC   terminal region of mammalian GRP, neuromedin B or neuromedin C; or the 10
CC   amino acid C-terminal region of amphibian bombesin. They act as at least
CC   partial agonists of the natural peptides. This peptide analogue was made
CC   by standard methods of synthesis and then cyclised. The linear form of
CC   this peptide sequence is also covered by the invention. See AAR14860-
CC   R14880 and AAR15035-R15040. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 65
AAR14861
ID   AAR14861 standard; protein; 9 AA.
XX
AC   AAR14861;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #2 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 4; Page 18; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 66
AAR14873
ID   AAR14873 standard; protein; 9 AA.
XX
AC   AAR14873;
XX
DT   25-MAR-2003  (revised)
DT   14-FEB-1992  (first entry)
XX
DE   Peptide analogue #14 of litorin, GRP, neuromedin or bombesin.
XX
KW   tissue proliferation; gastrin related peptide; peptide hormone.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= D-Phe
FT   Modified-site   6
FT                   /label= D-Ala
FT   Modified-site   9
FT                   /label= Nle
XX
PN   WO9117181-A.
XX
PD   14-NOV-1991.
XX
PF   09-MAY-1990;   90US-00520226.
XX
PR   09-MAY-1990;   90US-00520226.
```

```
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Kim SH,  Moreau JP;
XX
DR   WPI; 1991-353721/48.
XX
PT   Peptide agonists of litorin, gastrin releasing peptide - neuromedin B or
PT   C or bombesin, for treating cancer, preventing smooth muscle
PT   proliferation and suppressing appetite and alcohol craving.
XX
PS   Claim 16; Page 19; 25pp; English.
XX
CC   The C-terminal residue is amidated. This peptide is one of 27 specific
CC   examples of a highly generic formula. The peptides are all analogues of
CC   either litorin; the 10 amino acid C-terminal region of mammalian GRP,
CC   neuromedin B or neuromedin C; or the 10 amino acid C-terminal region of
CC   amphibian bombesin. They act as at least partial agonists of the natural
CC   peptides. The peptide analogues are made by standard methods of synthesis
CC   and can be cyclised. See AAR14860-R14880 and AAR15035-R15040. (Updated on
CC   25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 67
AAR11521
ID   AAR11521 standard; protein; 9 AA.
XX
AC   AAR11521;
XX
DT   25-MAR-2003  (revised)
DT   09-JAN-2003  (revised)
DT   13-JUN-1991  (first entry)
XX
DE   Example of peptide agonist of GRP, neuromedin, bombesin and litorin.
XX
KW   Non-malignant proliferative disease; cancer.
XX
OS   Homo sapiens.
XX
PN   WO9104040-A.
XX
PD   04-APR-1991.
XX
PF   15-SEP-1989;   89US-00408125.
XX
PR   15-SEP-1989;   89US-00408125.
PR   21-NOV-1989;   89US-00440039.
PR   05-MAY-1990;   90US-00520225.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Bogden AE,  Moreau JP;
XX
DR   WPI; 1991-117320/16.
XX
PT   Treatment of non malignant proliferative disease and cancer - by
PT   administration of natural peptide or fragment selected from gastrin-
PT   releasing peptide, neuromedin, amphibian bombesin or litorin.
XX
PS   Claim 17; Page 53; 73pp; English.
XX
CC   This is a peptide analogue of mammalian gastrin releasing peptide (GRP),
CC   neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
CC   these cpds. and is used to treat smooth muscle proliferation and cancer
CC   of the prostate, breast or lung. Residue 1 (Phe) is D-phenylalanine. See
CC   also AAR11519-20 and AAR11522-30. (Updated on 09-JAN-2003 to add missing
CC   OS field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 68
AAR11522
ID   AAR11522 standard; protein; 9 AA.
XX
AC   AAR11522;
XX
DT   25-MAR-2003  (revised)
DT   09-JAN-2003  (revised)
DT   13-JUN-1991  (first entry)
XX
DE   Example of peptide agonist of GRP, neuromedin, bombesin and litorin.
XX
KW   Non-malignant proliferative disease; cancer.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site    1. .1
FT                    /label= OTHER
FT                    /note= "D-p-chlorophenylalanine"
XX
PN   WO9104040-A.
XX
PD   04-APR-1991.
XX
PF   15-SEP-1989;   89US-00408125.
XX
PR   15-SEP-1989;   89US-00408125.
PR   21-NOV-1989;   89US-00440039.
PR   05-MAY-1990;   90US-00520225.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Bogden AE,  Moreau JP;
XX
DR   WPI; 1991-117320/16.
XX
PT   Treatment of non malignant proliferative disease and cancer - by
PT   administration of natural peptide or fragment selected from gastrin-
PT   releasing peptide, neuromedin, amphibian bombesin or litorin.
XX
PS   Claim 22; Page 54; 73pp; English.
XX
CC   This is a peptide analogue of mammalian gastrin releasing peptide (GRP),
CC   neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
CC   these cpds. and is used to treat smooth muscle proliferation and cancer
CC   of the prostate, breast or lung. Residue 6 (Ala) is D-alanine. See also
CC   AAR11519-21 and AAR11523-30. (Updated on 09-JAN-2003 to add missing OS
CC   field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;
```

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Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 69
AAR11529
ID   AAR11529 standard; protein; 9 AA.
XX
AC   AAR11529;
XX
DT   25-MAR-2003  (revised)
DT   09-JAN-2003  (revised)
DT   13-JUN-1991  (first entry)
XX
DE   Example of peptide antagonist of GRP, bombesin, neuromedin and litorin.
XX
KW   Non-malignant proliferative disease; cancer.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1. .1
FT                   /label= OTHER
FT                   /note= "D-beta naphthylalanine"
XX
PN   WO9104040-A.
XX
PD   04-APR-1991.
XX
PF   15-SEP-1989;   89US-00408125.
XX
PR   15-SEP-1989;   89US-00408125.
PR   21-NOV-1989;   89US-00440039.
PR   05-MAY-1990;   90US-00520225.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Bogden AE,  Moreau JP;
XX
DR   WPI; 1991-117320/16.
XX
PT   Treatment of non malignant proliferative disease and cancer - by
PT   administration of natural peptide or fragment selected from gastrin-
PT   releasing peptide, neuromedin, amphibian bombesin or litorin.
XX
PS   Claim 42; Page 60; 73pp; English.
XX
CC   This is an analogue of a natural peptide selected from: mammalian gastrin
CC   releasing peptide, neuromedin-B or -C, amphibian bombesin or litorin or
CC   their fragments. It is an antagonist of these cpds. and is used to treat
CC   smooth muscle proliferation and cancer of the prostate, breast or lung.
CC   Residues 8 (Leu) and 9 (Phe) are linked via a peptide bond. See also
CC   AAR11519-28 and AAR11530. (Updated on 09-JAN-2003 to add missing OS
CC   field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 AQWAVGHL 8


RESULT 70
AAR11525
ID   AAR11525 standard; protein; 9 AA.
XX
AC   AAR11525;
XX
DT   25-MAR-2003  (revised)
DT   09-JAN-2003  (revised)
DT   13-JUN-1991  (first entry)
XX
DE   Example of peptide agonist of GRP, neuromedin, bombesin and litorin.
XX
KW   Non-malignant proliferative disease; cancer; cyclic.
XX
OS   Homo sapiens.
XX
PN   WO9104040-A.
XX
PD   04-APR-1991.
XX
PF   15-SEP-1989;   89US-00408125.
XX
PR   15-SEP-1989;   89US-00408125.
PR   21-NOV-1989;   89US-00440039.
PR   05-MAY-1990;   90US-00520225.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Bogden AE,  Moreau JP;
XX
DR   WPI; 1991-117320/16.
XX
PT   Treatment of non malignant proliferative disease and cancer - by
PT   administration of natural peptide or fragment selected from gastrin-
PT   releasing peptide, neuromedin, amphibian bombesin or litorin.
XX
PS   Claim 33; Page 55; 73pp; English.
XX
CC   This is a peptide analogue of mammalian gastrin releasing peptide (GRP),
CC   neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
CC   these cpds. and is used to treat smooth muscle proliferation and cancer
CC   of the prostate, breast or lung. Residue 1 (Phe) is D-phenylalanine. See
CC   also AAR11519-24 and AAR11526-30. (Updated on 09-JAN-2003 to add missing
CC   OS field.) (Updated on 25-MAR-2003 to correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 71
AAR11520
ID   AAR11520 standard; protein; 9 AA.
XX
AC   AAR11520;
XX
DT   25-MAR-2003  (revised)
DT   09-JAN-2003  (revised)
DT   13-JUN-1991  (first entry)
XX
DE   Example of peptide agonist of GRP, neuromedin, bombesin and litorin.
XX
KW   Non-malignant proliferative disease; cancer.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1. .1
FT                   /label= OTHER
FT                   /note= "pyroglutamyl"
XX
PN   WO9104040-A.
XX
```

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PD   04-APR-1991.
XX
PF   15-SEP-1989;   89US-00408125.
XX
PR   15-SEP-1989;   89US-00408125.
PR   21-NOV-1989;   89US-00440039.
PR   05-MAY-1990;   90US-00520225.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Bogden AE,  Moreau JP;
XX
DR   WPI; 1991-117320/16.
XX
PT   Treatment of non malignant proliferative disease and cancer - by
PT   administration of natural peptide or fragment selected from gastrin-
PT   releasing peptide, neuromedin, amphibian bombesin or litorin.
XX
PS   Claim 15; Page 53; 73pp; English.
XX
CC   This is a peptide analogue of mammalian gastrin releasing peptide (GRP),
CC   neuromedin-B or -C, amphibian bombesin and litorin. It is an agonist of
CC   these cpds. and is used to treat smooth muscle proliferation and cancer
CC   of the prostate, breast or lung. See also AAR11519 and AAR11521-30.
CC   (Updated on 09-JAN-2003 to add missing OS field.) (Updated on 25-MAR-2003
CC   to correct PI field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 72
AAR24488
ID   AAR24488 standard; protein; 9 AA.
XX
AC   AAR24488;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (6).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV, 'Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 4; Page 42; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 73
AAR24489
ID   AAR24489 standard; protein; 9 AA.
XX
AC   AAR24489;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (7).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
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PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 5; Page 42; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 74
AAR28447
ID   AAR28447 standard; protein; 9 AA.
XX
AC   AAR28447;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (13).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid;  residues 8-9 are linked via a pseudo
FT                   peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 11; Page 42; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 75
AAR28462
ID   AAR28462 standard; protein; 9 AA.
XX
AC   AAR28462;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (30).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "Trp(For), For= formyl; residues 8-9 are linked
FT                   via a pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 9; 50pp; English.
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XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 76
AAR28458
ID   AAR28458 standard; protein; 9 AA.
XX
AC   AAR28458;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (26).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 8; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 77
AAR24491
ID   AAR24491 standard; protein; 9 AA.
XX
AC   AAR24491;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (9).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form; residues 8-9 are linked via a
FT                   pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 7; Page 42; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
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CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 78
AAR28448
ID   AAR28448 standard; protein; 9 AA.
XX
AC   AAR28448;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (17).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "R-Trp; R= NH2CO"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 7; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 79
AAR24490
ID   AAR24490 standard; protein; 9 AA.
XX
AC   AAR24490;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (8).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "pyroGlutamic acid in D-form"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form; residues 8-9 are linked via a
FT                   pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 6; Page 42; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;
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  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 80
AAR28460
ID   AAR28460 standard; protein; 9 AA.
XX
AC   AAR28460;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (28).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "Trp(For), For= formyl; residues 8-9 are linked
FT                   via a pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 8; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 81
AAR24486
ID   AAR24486 standard; protein; 9 AA.
XX
AC   AAR24486;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (4).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 2; Page 41; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8
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```
RESULT 82
AAR24492
ID   AAR24492 standard; protein; 9 AA.
XX
AC   AAR24492;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (10).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form; residues 8-9 are linked via a
FT                   pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 8; Page 42; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 83
AAR28673
ID   AAR28673 standard; protein; 9 AA.
XX
AC   AAR28673;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (32).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "NH2CO-Tpi, Tpi= 2,3,4,9 tetrahydro-1 H-pyrido-
FT                   [3,4-b]-indole-3-carboxylic acid"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "Tpi-OMe, Tpi= 2,3,4,9 tetrahydro-1 H- pyrido-[3,4
FT                   -b]-indole-3-carboxylic acid; residues 8-9 are linked via
FT                   a pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 9; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 84
AAR24483
ID   AAR24483 standard; peptide; 9 AA.
```

```
XX
AC   AAR24483;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (1).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 2; Page 41; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 85
AAR24493
ID   AAR24493 standard; protein; 9 AA.
XX
AC   AAR24493;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (11).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "R-2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid; R= H, NH2CO, acetyl, octanoyl or 3-
FT                   hydroxy-2-naphthoyl"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid;  residues 8-9 are linked via a pseudo
FT                   peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 9-10; Page 42; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 86
AAR28461
ID   AAR28461 standard; protein; 9 AA.
XX
AC   AAR28461;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (29).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
```

```
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "Trp(For), For= formyl; residues 8-9 are linked
FT                   via a pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 9; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 87
AAR28674
ID   AAR28674 standard; protein; 9 AA.
XX
AC   AAR28674;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (33).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
```

```
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b]- indole-3-
FT                   carboxylic acid in D-form"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "Tpi-R, Tpi= 2,3,4,9 tetrahydro-1 H- pyrido-[3,4-
FT                   b]-indole-3-carboxylic acid; R= NHME, OH, N2H2CONH2;
FT                   residues 8-9 are linked via a pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 9; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 88
AAR28450
ID   AAR28450 standard; protein; 9 AA.
XX
AC   AAR28450;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (19).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
```

```
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "3F-D-Trp"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 8; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 89
AAR28454
ID   AAR28454 standard; protein; 9 AA.
XX
AC   AAR28454;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (22).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "R-Trp; R= NH2CO"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 8; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 90
AAR28463
ID   AAR28463 standard; protein; 9 AA.
XX
AC   AAR28463;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (31).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
```

```
FT                  /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                  carboxylic acid, opt. in D-form"
FT   Modified-site  8
FT                  /label= psi
FT                  /note= "residues 8-9 are linked via a pseudo peptide
FT                  bond"
FT   Modified-site  9
FT                  /label= OTHER
FT                  /note= "Tpi-OMe, Tpi= 2,3,4,9 tetrahydro-1 H- pyrido-[3,4
FT                  -b]-indole-3-carboxylic acid, residues 8-9 are linked via
FT                  a pseudo peptide bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Disclosure; Page 9; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is an example of a highly generic
CC   formula for bombesin antagonists which are [psi8-9 pseudo] nonapeptides
CC   contg. D- or L-tryptophan or tryptophan analog 2,3,4,9-tetrahydro-1H-
CC   pyrido[3,4-b]-indol-3-carboxylic acid (Tpi) at the N- and/or C-terminal.
CC   The peptide is a bombesin/GRP (gastrin releasing peptide) antagonist and
CC   is useful for treatment of states of hypergastrinemia, e.g. pernicious
CC   anaemia, chronic atrophic gastritis, Zollinger-Ellison syndrome and
CC   vitiligo, associated with diffuse hyperplasia of gastric enterochromaffin
CC   -like cells, and with an increased risk of developing multifocal gastric
CC   carcinoid tumours. The peptide can also be used to treat lung, colon and
CC   gastric cancers. Dosage is 1- 1000 mircrog/kg parenterally. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 91
AAR24487
ID   AAR24487 standard; protein; 9 AA.
XX
AC   AAR24487;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (5).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "2,3,4,9 tetrahydro-1 H-pyrido-[3,4-b] indole-3-
FT                   carboxylic acid in D-form"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
FT   Modified-site   9
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
FT                   bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 3; Page 41; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 92
AAR24484
ID   AAR24484 standard; protein; 9 AA.
XX
AC   AAR24484;
XX
DT   25-MAR-2003  (revised)
DT   09-DEC-1992  (first entry)
XX
DE   [psi8-9 pseudo] Nonapeptide bombesin antagonist (2).
XX
KW   Bombesin; GRP; gastrin releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /label= psi
FT                   /note= "residues 8-9 are linked via a pseudo peptide
```

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FT                  bond"
FT   Modified-site  9
FT                  /label= psi
FT                  /note= "residues 8-9 are linked via a pseudo peptide
FT                  bond"
XX
PN   WO9209626-A1.
XX
PD   11-JUN-1992.
XX
PF   15-NOV-1991;   91WO-US008534.
XX
PR   29-NOV-1990;   90US-00619747.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1992-217019/26.
XX
PT   New nona:peptide bombesin antagonists - used for treating
PT   hypergastrinaemic states, such as pernicious anaemia and Zollinger-
PT   Ellison syndrome and also used against lung and gastric cancer, etc.
XX
PS   Claim 2; Page 41; 50pp; English.
XX
CC   The C-terminal is amidated. The peptide is a bombesin/GRP (gastrin
CC   releasing peptide) antagonist and is useful for treatment of states of
CC   hypergastrinemia, e.g. pernicious anaemia, chronic atrophic gastritis,
CC   Zollinger-Ellison syndrome and vitiligo, associated with diffuse
CC   hyperplasia of gastric enterochromaffin-like cells, and with an increased
CC   risk of developing multifocal gastric carcinoid tumours. The peptide can
CC   also be used to treat lung, colon and gastric cancers. Dosage is 1- 1000
CC   mircrog/kg parenterally. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 93
AAR29152
ID   AAR29152 standard; peptide; 9 AA.
XX
AC   AAR29152;
XX
DT   25-MAR-2003  (revised)
DT   16-APR-1993  (first entry)
XX
DE   Bombesin analogue (2).
XX
KW   Hepatoma; liver cancer; antagonist.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /note= "C-terminal is amidated"
XX
PN   WO9220363-A1.
XX
PD   26-NOV-1992.
XX
PF   11-MAY-1992;   92WO-US003916.
XX
PR   10-MAY-1991;   91US-00698681.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Bodgen AE,  Coy DH,  Kim SH,  Moreau J;
XX
DR   WPI; 1992-415466/50.
XX
PT   Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT   carrier.
XX
PS   Claim 6; Page 42; 54pp; English.
XX
CC   The peptide is an example of a highly generic formula. It is used in a
CC   medicament for treating hepatoma. The cpd. acts as antagonist to
CC   bombesin, which has been detected in a number of human cancer lines.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 94
AAR29151
ID   AAR29151 standard; peptide; 9 AA.
XX
AC   AAR29151;
XX
DT   25-MAR-2003  (revised)
DT   16-APR-1993  (first entry)
XX
DE   Bombesin analogue (1).
XX
KW   Hepatoma; liver cancer; antagonist.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /note= "C-terminal is amidated"
XX
PN   WO9220363-A1.
XX
PD   26-NOV-1992.
XX
PF   11-MAY-1992;   92WO-US003916.
XX
PR   10-MAY-1991;   91US-00698681.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Bodgen AE,  Coy DH,  Kim SH,  Moreau J;
XX
DR   WPI; 1992-415466/50.
XX
PT   Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT   carrier.
XX
PS   Claim 5; Page 42; 54pp; English.
XX
CC   The peptide is an example of a highly generic formula. It is used in a
CC   medicament for treating hepatoma. The cpd. acts as antagonist to
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CC   bombesin, which has been detected in a number of human cancer lines.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 95
AAR29154
ID   AAR29154 standard; peptide; 9 AA.
XX
AC   AAR29154;
XX
DT   25-MAR-2003  (revised)
DT   16-APR-1993  (first entry)
XX
DE   Bombesin analogue (4).
XX
KW   Hepatoma; liver cancer; antagonist.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8
FT                   /note= "CO -> CH2"
FT   Modified-site   9
FT                   /note= "p-Cl-Phe; C-terminal is amidated"
XX
PN   WO9220363-A1.
XX
PD   26-NOV-1992.
XX
PF   11-MAY-1992;   92WO-US003916.
XX
PR   10-MAY-1991;   91US-00698681.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Bodgen AE,  Coy DH,  Kim SH,  Moreau J;
XX
DR   WPI; 1992-415466/50.
XX
PT   Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT   carrier.
XX
PS   Claim 11; Page 48; 54pp; English.
XX
CC   The peptide is an example of a highly generic formula. It is used in a
CC   medicament for treating hepatoma. The cpd. acts as antagonist to
CC   bombesin, which has been detected in a number of human cancer lines.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 96
AAR29153
ID   AAR29153 standard; peptide; 9 AA.
XX
AC   AAR29153;
XX
DT   25-MAR-2003  (revised)
DT   16-APR-1993  (first entry)
XX
DE   Bombesin analogue (3).
XX
KW   Hepatoma; liver cancer; antagonist.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "p-Cl-Phe in D-form"
FT   Modified-site   8
FT                   /note= "CO -> CH2"
FT   Modified-site   9
FT                   /note= "C-terminal is amidated"
XX
PN   WO9220363-A1.
XX
PD   26-NOV-1992.
XX
PF   11-MAY-1992;   92WO-US003916.
XX
PR   10-MAY-1991;   91US-00698681.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Bodgen AE,  Coy DH,  Kim SH,  Moreau J;
XX
DR   WPI; 1992-415466/50.
XX
PT   Treatment of hepatoma - by admin. of admixed bombesin analogue with
PT   carrier.
XX
PS   Claim 11; Page 48; 54pp; English.
XX
CC   The peptide is an example of a highly generic formula. It is used in a
CC   medicament for treating hepatoma. The cpd. acts as antagonist to
CC   bombesin, which has been detected in a number of human cancer lines.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 97
AAR43757
ID   AAR43757 standard; peptide; 9 AA.
XX
AC   AAR43757;
XX
DT   25-MAR-2003  (revised)
DT   19-MAY-1994  (first entry)
XX
DE   MHC Class I allele HLA-A2.1 binding HPV18 E7 peptide.
XX
KW   Human papilloma virus; major histocompatibility complex; prevention;
KW   treatment; virus-related diseases; T cell response; cervical; human;
KW   carcinoma; adenoma; screening tools; diagnostics; diagnosis.
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XX
OS   Synthetic.
XX
PN   WO9322338-A1.
XX
PD   11-NOV-1993.
XX
PF   04-MAY-1993;   93WO-NL000093.
XX
PR   05-MAY-1992;   92EP-00201252.
PR   10-DEC-1992;   92EP-00203870.
PR   01-FEB-1993;   93EP-00200243.
PR   05-MAR-1993;   93EP-00200621.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Kast WM,  Melief CJM,  Sette AD,  Sidney JC;
XX
DR   WPI; 1993-368718/46.
XX
PT   Peptide(s) derived from human papilloma virus - which bind to a human
PT   major histocompatibility complex Class I molecule, used for prevention
PT   and treatment of virus-related diseases.
XX
PS   Claim 6; Page 52; 64pp; English.
XX
CC   The sequence is that of a peptide, derived from the E7 protein of human
CC   papilloma virus (HPV18) (residues 7-15), which is able to bind to human
CC   MHC Class I allele HLA-A2.1. It is able to induce a T cell response
CC   effective against HPV, in partic. a HLA class I-restricted CD8+ cytotoxic
CC   T cell response. It can be used for prevention and treatment of cervical
CC   carcinoma and/or adenoma and other HPV-related diseases. It can also be
CC   used as a screening tool and in diagnostic applications. (Updated on 25-
CC   MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 LQDIVLHL 9


RESULT 98
AAR40901
ID   AAR40901 standard; peptide; 9 AA.
XX
AC   AAR40901;
XX
DT   25-MAR-2003  (revised)
DT   10-FEB-1994  (first entry)
XX
DE   Bombesin analogue #3.
XX
KW   Bombesin; analogue; antagonist; agonist; antimitotic; anti-secretory;
KW   activity; digestion; food intake; tissue growth; lung; pancreas;
KW   intestine; ulcer; cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "Ac-D-Phe"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "N(Et), delta z-Phe-OMe"
XX
PN   WO9316105-A1.
XX
PD   19-AUG-1993.
XX
PF   07-JAN-1993;   93WO-US000183.
XX
PR   07-FEB-1992;   92US-00833834.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1993-272830/34.
XX
PT   Bombesin analogues contg. modified phenylalanine derivs. - used for
PT   stimulating digestion, decreasing food intake and stimulating growth of
PT   organ tissues.
XX
PS   Example 1; Page 40; 54pp; English.
XX
CC   The sequences given in AAR40899-908 are bombesin analogues. These
CC   peptides were prepared by solid phase sequential or block synthesis.
CC   These peptides act as bombesin antagonists or agonists and have
CC   antimitotic and/or anti-secretory activity. They may be used for
CC   stimulating digestion in patients, decreasing food intake in patients or
CC   stimulating growth of organ tissue of lung, pancreatic or intestinal
CC   origin in patients. They can be used for the treatment of
CC   gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 99
AAR40902
ID   AAR40902 standard; peptide; 9 AA.
XX
AC   AAR40902;
XX
DT   25-MAR-2003  (revised)
DT   10-FEB-1994  (first entry)
XX
DE   Bombesin analogue #4.
XX
KW   Bombesin; analogue; antagonist; agonist; antimitotic; anti-secretory;
KW   activity; digestion; food intake; tissue growth; lung; pancreas;
KW   intestine; ulcer; cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "Ac-D-Phe"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "Delta z-Phe-OMe"
XX
PN   WO9316105-A1.
XX
PD   19-AUG-1993.
XX
PF   07-JAN-1993;   93WO-US000183.
XX
PR   07-FEB-1992;   92US-00833834.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
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XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1993-272830/34.
XX
PT   Bombesin analogues contg. modified phenylalanine derivs. - used for
PT   stimulating digestion, decreasing food intake and stimulating growth of
PT   organ tissues.
XX
PS   Example 1; Page 40; 54pp; English.
XX
CC   The sequences given in AAR40899-908 are bombesin analogues. These
CC   peptides were prepared by solid phase sequential or block synthesis.
CC   These peptides act as bombesin antagonists or agonists and have
CC   antimitotic and/or anti-secretory activity. They may be used for
CC   stimulating digestion in patients, decreasing food intake in patients or
CC   stimulating growth of organ tissue of lung, pancreatic or intestinal
CC   origin in patients. They can be used for the treatment of
CC   gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 100
AAR40903
ID   AAR40903 standard; peptide; 9 AA.
XX
AC   AAR40903;
XX
DT   25-MAR-2003  (revised)
DT   10-FEB-1994  (first entry)
XX
DE   Bombesin analogue #5.
XX
KW   Bombesin; analogue; antagonist; agonist; antimitotic; anti-secretory;
KW   activity; digestion; food intake; tissue growth; lung; pancreas;
KW   intestine; ulcer; cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "Ac-D-Phe"
FT   Modified-site   6
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "N(Me), delta z-Phe-OMe"
XX
PN   WO9316105-A1.
XX
PD   19-AUG-1993.
XX
PF   07-JAN-1993;   93WO-US000183.
XX
PR   07-FEB-1992;   92US-00833834.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1993-272830/34.
XX
PT   Bombesin analogues contg. modified phenylalanine derivs. - used for
PT   stimulating digestion, decreasing food intake and stimulating growth of
PT   organ tissues.
XX
PS   Example 1; Page 41; 54pp; English.
XX
CC   The sequences given in AAR40899-908 are bombesin analogues. These
CC   peptides were prepared by solid phase sequential or block synthesis.
CC   These peptides act as bombesin antagonists or agonists and have
CC   antimitotic and/or anti-secretory activity. They may be used for
CC   stimulating digestion in patients, decreasing food intake in patients or
CC   stimulating growth of organ tissue of lung, pancreatic or intestinal
CC   origin in patients. They can be used for the treatment of
CC   gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVAHL 8


RESULT 101
AAR40907
ID   AAR40907 standard; peptide; 9 AA.
XX
AC   AAR40907;
XX
DT   25-MAR-2003  (revised)
DT   10-FEB-1994  (first entry)
XX
DE   Bombesin analogue #9.
XX
KW   Bombesin; analogue; antagonist; agonist; antimitotic; anti-secretory;
KW   activity; digestion; food intake; tissue growth; lung; pancreas;
KW   intestine; ulcer; cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "Glp"
XX
PN   WO9316105-A1.
XX
PD   19-AUG-1993.
XX
PF   07-JAN-1993;   93WO-US000183.
XX
PR   07-FEB-1992;   92US-00833834.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1993-272830/34.
XX
PT   Bombesin analogues contg. modified phenylalanine derivs. - used for
PT   stimulating digestion, decreasing food intake and stimulating growth of
PT   organ tissues.
XX
PS   Example 1; Page 43; 54pp; English.
XX
CC   The sequences given in AAR40899-908 are bombesin analogues. These
CC   peptides were prepared by solid phase sequential or block synthesis.
CC   These peptides act as bombesin antagonists or agonists and have
CC   antimitotic and/or anti-secretory activity. They may be used for
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CC   stimulating digestion in patients, decreasing food intake in patients or
CC   stimulating growth of organ tissue of lung, pancreatic or intestinal
CC   origin in patients. They can be used for the treatment of
CC   gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 GQTAVGHL 9


RESULT 102
AAR40900
ID   AAR40900 standard; peptide; 9 AA.
XX
AC   AAR40900;
XX
DT   25-MAR-2003  (revised)
DT   10-FEB-1994  (first entry)
XX
DE   Bombesin analogue #2.
XX
KW   Bombesin; analogue; antagonist; agonist; antimitotic; anti-secretory;
KW   activity; digestion; food intake; tissue growth; lung; pancreas;
KW   intestine; ulcer; cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "Ac-D-Phe"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "N(Me), delta z-Phe-OMe"
XX
PN   WO9316105-A1.
XX
PD   19-AUG-1993.
XX
PF   07-JAN-1993;   93WO-US000183.
XX
PR   07-FEB-1992;   92US-00833834.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1993-272830/34.
XX
PT   Bombesin analogues contg. modified phenylalanine derivs. - used for
PT   stimulating digestion, decreasing food intake and stimulating growth of
PT   organ tissues.
XX
PS   Example 1; Page 39; 54pp; English.
XX
CC   The sequences given in AAR40899-908 are bombesin analogues. These
CC   peptides were prepared by solid phase sequential or block synthesis.
CC   These peptides act as bombesin antagonists or agonists and have
CC   antimitotic and/or anti-secretory activity. They may be used for
CC   stimulating digestion in patients, decreasing food intake in patients or
CC   stimulating growth of organ tissue of lung, pancreatic or intestinal
CC   origin in patients. They can be used for the treatment of
CC   gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 103
AAR40905
ID   AAR40905 standard; peptide; 9 AA.
XX
AC   AAR40905;
XX
DT   25-MAR-2003  (revised)
DT   10-FEB-1994  (first entry)
XX
DE   Bombesin analogue #7.
XX
KW   Bombesin; analogue; antagonist; agonist; antimitotic; anti-secretory;
KW   activity; digestion; food intake; tissue growth; lung; pancreas;
KW   intestine; ulcer; cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "Glp"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "Delta z-Phe-OMe"
XX
PN   WO9316105-A1.
XX
PD   19-AUG-1993.
XX
PF   07-JAN-1993;   93WO-US000183.
XX
PR   07-FEB-1992;   92US-00833834.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1993-272830/34.
XX
PT   Bombesin analogues contg. modified phenylalanine derivs. - used for
PT   stimulating digestion, decreasing food intake and stimulating growth of
PT   organ tissues.
XX
PS   Example 1; Page 42; 54pp; English.
XX
CC   The sequences given in AAR40899-908 are bombesin analogues. These
CC   peptides were prepared by solid phase sequential or block synthesis.
CC   These peptides act as bombesin antagonists or agonists and have
CC   antimitotic and/or anti-secretory activity. They may be used for
CC   stimulating digestion in patients, decreasing food intake in patients or
CC   stimulating growth of organ tissue of lung, pancreatic or intestinal
CC   origin in patients. They can be used for the treatment of
CC   gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
```

```
Db          1 XQWAVGHL 8


RESULT 104
AAR40906
ID   AAR40906 standard; peptide; 9 AA.
XX
AC   AAR40906;
XX
DT   25-MAR-2003  (revised)
DT   10-FEB-1994  (first entry)
XX
DE   Bombesin analogue #8.
XX
KW   Bombesin; analogue; antagonist; agonist; antimitotic; anti-secretory;
KW   activity; digestion; food intake; tissue growth; lung; pancreas;
KW   intestine; ulcer; cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "Glp"
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "N(CH3)delta z-Phe-OMe"
XX
PN   WO9316105-A1.
XX
PD   19-AUG-1993.
XX
PF   07-JAN-1993;   93WO-US000183.
XX
PR   07-FEB-1992;   92US-00833834.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1993-272830/34.
XX
PT   Bombesin analogues contg. modified phenylalanine derivs. - used for
PT   stimulating digestion, decreasing food intake and stimulating growth of
PT   organ tissues.
XX
PS   Example 1; Page 42; 54pp; English.
XX
CC   The sequences given in AAR40899-908 are bombesin analogues. These
CC   peptides were prepared by solid phase sequential or block synthesis.
CC   These peptides act as bombesin antagonists or agonists and have
CC   antimitotic and/or anti-secretory activity. They may be used for
CC   stimulating digestion in patients, decreasing food intake in patients or
CC   stimulating growth of organ tissue of lung, pancreatic or intestinal
CC   origin in patients. They can be used for the treatment of
CC   gastrointestinal and pancreatic ulcers and for the treatment of cancers.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 105
AAR59105
ID   AAR59105 standard; peptide; 9 AA.
XX
AC   AAR59105;
XX
DT   27-AUG-2003  (revised)
DT   25-MAR-2003  (revised)
DT   02-MAY-1995  (first entry)
XX
DE   Peptide fragment (1.0240) of HPV binds HLA-A2.1.
XX
KW   antigen; epitope; immunogenic target protein; PSA; HBVc; HBVs; EBV; HIV1;
KW   core antigen; surface antigen; pharmaceutical composition; in vivo;
KW   ex vivo; therapeutic; diagnostic; MHC class I molecule;
KW   major histocompatability complex; HLA-A2.1; 9mer; 10mer; anchor;
KW   human leukocyte antigen; HPV.
XX
OS   Human papillomavirus type 18.
XX
PN   WO9420127-A1.
XX
PD   15-SEP-1994.
XX
PF   04-MAR-1994;   94WO-US002353.
XX
PR   05-MAR-1993;   93US-00027146.
PR   04-JUN-1993;   93US-00073205.
PR   29-NOV-1993;   93US-00159184.
XX
PA   (CYTE-) CYTEL CORP.
XX
PI   Grey HM,  Sette A,  Sidney J,  Kast W;
XX
DR   WPI; 1994-302678/37.
XX
PT   Immunogenic peptide(s) having an HLA-A2.1 binding motif - used for
PT   treatment or prophylaxis of cancer, virus infection or autoimmune
PT   diseases.
XX
PS   Example 5; Page 100; 138pp; English.
XX
CC   AAR59104-264 are immunogenic 9mer peptides that contain a HLA-A2.1
CC   binding motif. These peptides bind HLA-A2.1 and have a binding affinity
CC   of at least 1% as compared to a reference peptide (AAR71293). AAR59105
CC   has an IC50 of 0.76 and the sequence occurs at position 7 in the HPV E7
CC   protein. The peptides of the invention can induce cytotoxic T lymphocytes
CC   which can react with target cells. They can be used for the treatment or
CC   prophlyaxis of cancer, eg. prostate cancer or lymphoma, etc. (Updated on
CC   25-MAR-2003 to correct PN field.) (Updated on 27-AUG-2003 to correct OS
CC   field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 LQDIVLHL 9


RESULT 106
AAR69367
ID   AAR69367 standard; peptide; 9 AA.
XX
AC   AAR69367;
XX
DT   25-MAR-2003  (revised)
DT   09-JUL-1995  (first entry)
XX
DE   Bombesin antagonist pseudopeptide.
XX
KW   Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
KW   hypergastraemia; pernicious anaemia; vitiligo; Zollinger-;
KW   Ellison syndrome; chronic atrophic gastritis.
```

```
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-pGlu"
FT   Modified-site   8. .9
FT                   /note= "reduced peptide bond (i.e. CH2NH) between these
FT                   two residues, "
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "Tac-NH2, where Tac is Tac is thiazolidine-4-
FT                   carboxylic acid"
XX
PN   WO9421674-A1.
XX
PD   29-SEP-1994.
XX
PF   07-MAR-1994;   94WO-US002511.
XX
PR   15-MAR-1993;   93US-00031325.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1994-316936/39.
XX
PT   New bombesin antagonist peptide derivs. contg. reduced leucine residue -
PT   useful for treating cancer and states of hyper-gastrinaemia e.g.
PT   pernicious anaemia.
XX
PS   Disclosure; Page 13; 85pp; English.
XX
CC   New bombesin antagonist pseudopeptides are disclosed which have a
CC   thiazolidine carboxylic acid residue at the C-terminal and a reduced
CC   peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
CC   residue. In some cases the Tac residue can be replaced by Cys or Pen. The
CC   present sequence is a specific example of the pseudopeptides. The
CC   peptides are useful for treating lung, colonic and gastric cancers and
CC   hypergastrinaemic conditions such as pernicious anaemia, chronic atrophic
CC   gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on 25-MAR-
CC   2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 107
AAR69366
ID   AAR69366 standard; peptide; 9 AA.
XX
AC   AAR69366;
XX
DT   25-MAR-2003  (revised)
DT   09-JUL-1995  (first entry)
XX
DE   Bombesin antagonist pseudopeptide.
XX
KW   Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
KW   hypergastraemia; pernicious anaemia; vitiligo; Zollinger-;
KW   Ellison syndrome; chronic atrophic gastritis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-Tpi, where Tpi is 2,3,4,9-tetrahydro-1H-
FT                   pyrido[3,4-b]indole-3-carboxylic acid"
FT   Modified-site   8. .9
FT                   /note= "reduced peptide bond (i.e. CH2NH) between these
FT                   two residues, "
FT   Modified-site   9
FT                   /label= OTHER
FT                   /note= "Tac-NH2, where Tac is Tac is thiazolidine-4-
FT                   carboxylic acid"
XX
PN   WO9421674-A1.
XX
PD   29-SEP-1994.
XX
PF   07-MAR-1994;   94WO-US002511.
XX
PR   15-MAR-1993;   93US-00031325.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1994-316936/39.
XX
PT   New bombesin antagonist peptide derivs. contg. reduced leucine residue -
PT   useful for treating cancer and states of hyper-gastrinaemia e.g.
PT   pernicious anaemia.
XX
PS   Claim 8, 13; Page 77, 79; 85pp; English.
XX
CC   New bombesin antagonist pseudopeptides are disclosed which have a
CC   thiazolidine carboxylic acid residue at the C-terminal and a reduced
CC   peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
CC   residue. In some cases the Tac residue can be replaced by Cys or Pen. The
CC   present sequence is a specifically claimed example of the pseudopeptides.
CC   The peptides are useful for treating lung, colonic and gastric cancers
CC   and hypergastrinaemic conditions such as pernicious anaemia, chronic
CC   atrophic gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on
CC   25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 108
AAR69369
ID   AAR69369 standard; peptide; 9 AA.
XX
AC   AAR69369;
XX
DT   25-MAR-2003  (revised)
DT   09-JUL-1995  (first entry)
XX
DE   Bombesin antagonist pseudopeptide.
XX
KW   Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
KW   hypergastraemia; pernicious anaemia; vitiligo; Zollinger-;
KW   Ellison syndrome; chronic atrophic gastritis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /label= OTHER
```

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FT                  /note= "L or D-3-(3-pyridyl)alanine; L- or D-Tpi where
FT                  Tpi is 2,3,4,9-tetrahydro-1H-pyrido- [3,4-b]indole- 3-
FT                  carboxylic acid; or Hca where Hca is des-amino-Phe (i.e.
FT                  cinnamic acid)"
FT  Modified-site   8. .9
FT                  /note= "reduced peptide bond (i.e. CH2NH) between these
FT                  two residues, "
FT  Modified-site   9
FT                  /note= "Cys-NH2"
XX
PN  WO9421674-A1.
XX
PD  29-SEP-1994.
XX
PF  07-MAR-1994;   94WO-US002511.
XX
PR  15-MAR-1993;   93US-00031325.
XX
PA  (TULA ) TULANE EDUCATIONAL FUND.
XX
PI  Schally AV,  Cai RZ;
XX
DR  WPI; 1994-316936/39.
XX
PT  New bombesin antagonist peptide derivs. contg. reduced leucine residue -
PT  useful for treating cancer and states of hyper-gastrinaemia e.g.
PT  pernicious anaemia.
XX
PS  Example 5; Page 37; 85pp; English.
XX
CC  New bombesin antagonist pseudopeptides are disclosed which have a
CC  thiazolidine carboxylic acid residue at the C-terminal and a reduced
CC  peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
CC  residue. In some cases the Tac residue can be replaced by Cys or Pen. The
CC  present sequence is a specific example of the pseudopeptides. The
CC  peptides are useful for treating lung, colonic and gastric cancers and
CC  hypergastrinaemic conditions such as pernicious anaemia, chronic atrophic
CC  gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on 25-MAR-
CC  2003 to correct PN field.)
XX
SQ  Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 109
AAR69365
ID  AAR69365 standard; peptide; 9 AA.
XX
AC  AAR69365;
XX
DT  25-MAR-2003  (revised)
DT  09-JUL-1995  (first entry)
XX
DE  Bombesin antagonist pseudopeptide.
XX
KW  Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
KW  hypergastraemia; pernicious anaemia; vitiligo; Zollinger-;
KW  Ellison syndrome; chronic atrophic gastritis.
XX
OS  Synthetic.
XX
FH  Key             Location/Qualifiers
FT  Misc-difference 1
FT                  /note= "D-Phe"
FT  Modified-site   8. .9
FT                  /note= "reduced peptide bond (i.e. CH2NH) between these
FT                  two residues, "
FT  Modified-site   9
FT                  /label= OTHER
FT                  /note= "Tac-NH2 or 5,5-dimethyl-Tac-NH2, where Tac is
FT                  thiazolidine-4-carboxylic acid"
XX
PN  WO9421674-A1.
XX
PD  29-SEP-1994.
XX
PF  07-MAR-1994;   94WO-US002511.
XX
PR  15-MAR-1993;   93US-00031325.
XX
PA  (TULA ) TULANE EDUCATIONAL FUND.
XX
PI  Schally AV,  Cai RZ;
XX
DR  WPI; 1994-316936/39.
XX
PT  New bombesin antagonist peptide derivs. contg. reduced leucine residue -
PT  useful for treating cancer and states of hyper-gastrinaemia e.g.
PT  pernicious anaemia.
XX
PS  Claim 7, 9; Page 76, 77; 85pp; English.
XX
CC  New bombesin antagonist pseudopeptides are disclosed which have a
CC  thiazolidine carboxylic acid residue at the C-terminal and a reduced
CC  peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
CC  residue. In some cases the Tac residue can be replaced by Cys or Pen. The
CC  present sequence is a specifically claimed example of the pseudopeptides.
CC  The peptides are useful for treating lung, colonic and gastric cancers
CC  and hypergastrinaemic conditions such as pernicious anaemia, chronic
CC  atrophic gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on
CC  25-MAR-2003 to correct PN field.)
XX
SQ  Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 110
AAR69368
ID  AAR69368 standard; peptide; 9 AA.
XX
AC  AAR69368;
XX
DT  25-MAR-2003  (revised)
DT  09-JUL-1995  (first entry)
XX
DE  Bombesin antagonist pseudopeptide.
XX
KW  Bombesin antagonist; receptor blocker; gastrin releasing; anticancer;
KW  hypergastraemia; pernicious anaemia; vitiligo; Zollinger-;
KW  Ellison syndrome; chronic atrophic gastritis.
XX
OS  Synthetic.
XX
FH  Key             Location/Qualifiers
FT  Misc-difference 1
FT                  /note= "D-Trp"
FT  Modified-site   8. .9
FT                  /note= "reduced peptide bond (i.e. CH2NH) between these
FT                  two residues, "
FT  Modified-site   9
FT                  /label= OTHER
FT                  /note= "Tac-NH2, where Tac is Tac is thiazolidine-4-
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FT                   carboxylic acid"
XX
PN   WO9421674-A1.
XX
PD   29-SEP-1994.
XX
PF   07-MAR-1994;   94WO-US002511.
XX
PR   15-MAR-1993;   93US-00031325.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Schally AV,  Cai RZ;
XX
DR   WPI; 1994-316936/39.
XX
PT   New bombesin antagonist peptide derivs. contg. reduced leucine residue -
PT   useful for treating cancer and states of hyper-gastrinaemia e.g.
PT   pernicious anaemia.
XX
PS   Disclosure; Page 13; 85pp; English.
XX
CC   New bombesin antagonist pseudopeptides are disclosed which have a
CC   thiazolidine carboxylic acid residue at the C-terminal and a reduced
CC   peptide linkage (CH2NH instead of CONH) joining it to the preceding Leu
CC   residue. In some cases the Tac residue can be replaced by Cys or Pen. The
CC   present sequence is a specific example of the pseudopeptides. The
CC   peptides are useful for treating lung, colonic and gastric cancers and
CC   hypergastrinaemic conditions such as pernicious anaemia, chronic atrophic
CC   gastritis, Zollinger-Ellison syndrome or vitiligo. (Updated on 25-MAR-
CC   2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 WQWAVGHL 8


RESULT 111
AAR47619
ID   AAR47619 standard; peptide; 9 AA.
XX
AC   AAR47619;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Bombesin-like peptide analogue.
XX
KW   Acrosome reaction; fertilisation.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= pGlu
FT   Misc-difference 8. .9
FT                   /note= "reduced peptide bond between the two"
FT   Modified-site   9
FT                   /note= "amidated"
XX
PN   WO9402018-A1.
XX
PD   03-FEB-1994.
XX
PF   27-JUL-1993;   93WO-US007044.
XX
PR   27-JUL-1992;   92US-00919731.
PR   23-MAR-1993;   93US-00039778.
XX
PA   (MEDI-) MEDICAL RES FOUND OREGON.
XX
PI   Spindel ER,  Vijayaraghavan S,  Nagalia SR,  Li K;
XX
DR   WPI; 1994-048427/06.
XX
PT   New bombesin-like acrosome-related peptides - used to promote the
PT   acrosome reaction to promote fertilisation or to develop antagonists to
PT   inhibit fertilisation.
XX
PS   Disclosure; Page 54; 68pp; English.
XX
CC   The peptide is a bombesin-like peptide which is capable of promoting the
CC   acrosome reaction to promote fertilisation. Bombesin antagonists can be
CC   used to inhibit fertilisation. See also AAR47609-20. (Updated on 25-MAR-
CC   2003 to correct PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 112
AAR69564
ID   AAR69564 standard; peptide; 9 AA.
XX
AC   AAR69564;
XX
DT   25-MAR-2003  (revised)
DT   11-SEP-1995  (first entry)
XX
DE   [D-Tpi6, Leu13-psi-Leu14]-Bombesin(6-14).
XX
KW   Bombesin; antagonist; AIDS; acquired immune deficiency syndrome;
KW   AIDS-related complex; immunostimulant.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-2,3,4,9-tetrahydro-1H-pyrido[3,4-b]- indole-3-
FT                   carboxylic acid"
FT   Modified-site   8. .9
FT                   /note= "pseudopeptide bond"
FT   Modified-site   8
FT                   /label= OTHER
FT                   /note= "reduced Leu isostere"
XX
PN   WO9500168-A1.
XX
PD   05-JAN-1995.
XX
PF   02-APR-1994;   94WO-EP001037.
XX
PR   18-JUN-1993;   93DE-04320201.
XX
PA   (ASTA ) ASTA MEDICA AG.
XX
PI   Engel J,  Kutscher B,  Bernd M,  Niemeyer U;
XX
DR   WPI; 1995-051750/07.
XX
PT   Medicament for AIDS and ARC control and as immunostimulant - contains new
PT   and known LHRH and bombesin peptide antagonists.
```

```
XX
PS   Claim 9; Page 25; 33pp; German.
XX
CC   This is a specifically claimed example of a highly generic formula for
CC   bombesin antagonists. Such peptides are particularly useful for treatment
CC   of AIDS and AIDS-related complex. The peptides act as immunostimulants
CC   and have low toxicity compared to AZT. (Updated on 25-MAR-2003 to correct
CC   PN field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 113
AAY01936
ID   AAY01936 standard; peptide; 9 AA.
XX
AC   AAY01936;
XX
DT   25-MAR-2003  (revised)
DT   01-JUL-1999  (first entry)
XX
DE   Peptide analogue of bombesin.
XX
KW   Somatostatin analogue; peptide derivative; treatment; acromegaly;
KW   pancreatitis; trauma induced proliferation; diabetes; cancer;
KW   diabetic retinopathy; restenosis; angioplasty; AIDS; arteritis;
KW   neurogenic inflammation; gastrointestinal probelem; diarrhoea;
KW   bombesin analogue.
XX
OS   Synthetic.
XX
PN   US5552520-A.
XX
PD   03-SEP-1996.
XX
PF   09-AUG-1994;   94US-00287957.
XX
PR   09-AUG-1993;   93US-00104194.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Kim SH,  Dong ZX,  Taylor J,  Keyes SR,  Moreau S;
XX
DR   WPI; 1996-412130/41.
XX
PT   New modified peptide, e.g. somatostatin, derivs. - have enhanced
PT   biological activity compared with the corresp. unmodified peptide deriv.
XX
PS   Example 5; Col 19-20; 45pp; English.
XX
CC   The present sequence represents a bombesin analogue. The specification
CC   describes somatostatin analogues (AAY01821-935) which are used as the
CC   peptide moiety in the peptide derivatives of the invention. These peptide
CC   derivatives contain one or more substituents separately linked by an
CC   amide, amino, or sulphonamide bond to an amino group either on the N-
CC   terminal end or side chain of a peptide moiety. The peptide derivatives
CC   have more potent and prolonged biological activity compared with the
CC   corresponding unmodified peptide. In particular, somatostatin derivatives
CC   have greatly improved potency and selectivity. The peptide derivatives
CC   are used to treat diseases susceptible to treatment by the corresponding
CC   unmodified peptides, e.g. somatostatin derivatives are useful for
CC   treating cancer, acromegaly, pancreatitis, trauma induced proliferation,
CC   diabetes, diabetic retinopathy, restenosis following angioplasty, AIDS,
CC   neurogenic inflammation, arteritis and gastrointestinal problems, e.g.
CC   diarrhoea. (Updated on 25-MAR-2003 to correct PF field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 114
AAW00310
ID   AAW00310 standard; peptide; 9 AA.
XX
AC   AAW00310;
XX
DT   10-JUN-1997  (first entry)
XX
DE   Bombesin analogue #5.
XX
KW   Bombesin analogue; tumour; inhibition; smooth-muscle proliferation;
KW   suppression; appetite; pancreatic secretion; alcohol craving; amphibian;
KW   mammal; gastrin-releasing peptide; GRP; neuromedin B; NMB; neuromedin C;
KW   NMC; litorin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= bAla
FT   Modified-site   9
FT                   /label= Nle
FT                   /note= "Amidated C-terminal"
XX
PN   AU9514808-A.
XX
PD   26-SEP-1996.
XX
PF   13-MAR-1995;   95AU-00014808.
XX
PR   13-MAR-1995;   95AU-00014808.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Kim SH,  Moreau J;
XX
DR   WPI; 1996-455920/46.
XX
PT   New bombesin peptide analogues - for treating cancer, inhibiting smooth-
PT   muscle proliferation, etc.
XX
PS   Claim 16; Page 17; 22pp; English.
XX
CC   The sequence given in AAW00306-10 are bombesin analogues which are useful
CC   for treating tumours, inhibiting smooth-muscle proliferation, suppressing
CC   appetite, stimulating pancreatic secretion and suppressing craving for
CC   alcohol. These peptides are based on the amphibian peptide bombesin which
CC   is closely related to the mammalian homologue gastrin-releasing peptide
CC   (GRP), neuromedin B (NMB), neuromedin C (NMC) and litorin
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::||||
Db          1 FQWAVXHL 8
```

```
RESULT 115
AAW00307
ID   AAW00307 standard; peptide; 9 AA.
XX
AC   AAW00307;
XX
DT   10-JUN-1997  (first entry)
XX
DE   Bombesin analogue #2.
XX
KW   Bombesin analogue; tumour; inhibition; smooth-muscle proliferation;
KW   suppression; appetite; pancreatic secretion; alcohol craving; amphibian;
KW   mammal; gastrin-releasing peptide; GRP; neuromedin B; NMB; neuromedin C;
KW   NMC; litorin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= bAla
FT   Modified-site   9
FT                   /note= "Amidated C-terminal"
XX
PN   AU9514808-A.
XX
PD   26-SEP-1996.
XX
PF   13-MAR-1995;   95AU-00014808.
XX
PR   13-MAR-1995;   95AU-00014808.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Kim SH,  Moreau J;
XX
DR   WPI; 1996-455920/46.
XX
PT   New bombesin peptide analogues - for treating cancer, inhibiting smooth-
PT   muscle proliferation, etc.
XX
PS   Claim 13; Page 17; 22pp; English.
XX
CC   The sequence given in AAW00306-10 are bombesin analogues which are useful
CC   for treating tumours, inhibiting smooth-muscle proliferation, suppressing
CC   appetite, stimulating pancreatic secretion and suppressing craving for
CC   alcohol. These peptides are based on the amphibian peptide bombesin which
CC   is closely related to the mammalian homologue gastrin-releasing peptide
CC   (GRP), neuromedin B (NMB), neuromedin C (NMC) and litorin
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::||||
Db          1 FQWAVXHL 8


RESULT 116
AAW39675
ID   AAW39675 standard; peptide; 9 AA.
XX
AC   AAW39675;
XX
DT   11-JUN-1998  (first entry)
XX
DE   HPV18 E7 peptide (pos. 7-15).
XX
KW   T cell epitope; immune response; human leukocyte antigen; HLA Class I;
KW   vaccine; immunogenic; major histocompatablilty complex; MHC; B cell;
KW   disease; anti-tumour; anti-viral.
XX
OS   Human papillomavirus.
XX
PN   WO9741440-A1.
XX
PD   06-NOV-1997.
XX
PF   28-APR-1997;   97WO-NL000229.
XX
PR   26-APR-1996;   96EP-00201145.
PR   23-DEC-1996;   96EP-00203670.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
PA   (SCIS-) SCI SEED CAPITAL INVESTMENTS BV.
XX
PI   Van Der Burg SH,  Kast WM,  Toes REM,  Offringa R,  Melief CJM;
XX
DR   WPI; 1997-549891/50.
XX
PT   Method of selecting T cell peptide epitope(s) - by measuring the
PT   stability of HLA class I-peptide complexes on intact B cells.
XX
PS   Example 3; Page 79; 109pp; English.
XX
CC   Peptides AAW39430-W39734 are used in a novel method for the selection of
CC   immunogenic T-cell peptide epitopes present in polypeptide antigens. The
CC   method involves the identification of peptide sequences capable of
CC   binding to an HLA (human leukocyte antigen) class I molecule and
CC   measuring the binding of this epitope peptide to the HLA class I peptide.
CC   The stability of binding of the peptide and MHC (major histocompatablilty
CC   complex) class I molecule is measured on intact human B cells carrying
CC   the MHC molecule at their cell surfaces. The method can be used to select
CC   peptide epitopes for generating vaccines against a disease associated
CC   with the polypeptide, e.g. cancers or AIDS. The peptide epitopes are
CC   especially T-cell peptide epitopes with strong anti-tumour and anti-viral
CC   immune responses. Peptide AAW39675 is derived from the human
CC   papillomavirus type 18 E7 protein and is capable of binding to the human
CC   MHC Class I allele HLA-A2.1
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 LQDIVLHL 9


RESULT 117
AAW51201
ID   AAW51201 standard; peptide; 9 AA.
XX
AC   AAW51201;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
```

```
FT   Misc-difference 6
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /label= Nle
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;   95US-00387634.
XX
PR   09-MAY-1990;   90US-00520226.
PR   13-AUG-1992;   92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 16; Col 14; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 118
AAW51206
ID   AAW51206 standard; peptide; 9 AA.
XX
AC   AAW51206;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;   95US-00387634.
XX
PR   09-MAY-1990;   90US-00520226.
PR   13-AUG-1992;   92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 21; Col 14; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 YQWAVGHL 8


RESULT 119
AAW51195
ID   AAW51195 standard; peptide; 9 AA.
XX
AC   AAW51195;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
```

```
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;    95US-00387634.
XX
PR   09-MAY-1990;    90US-00520226.
PR   13-AUG-1992;    92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 9; Col 13; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVAHL 8


RESULT 120
AAW51193
ID   AAW51193 standard; peptide; 9 AA.
XX
AC   AAW51193;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form residue, optionally D-p-chlorophenyl-
FT                   alanine"
FT   Modified-site   9
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;    95US-00387634.
XX
PR   09-MAY-1990;    90US-00520226.
PR   13-AUG-1992;    92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 5; Col 13; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 121
AAW51200
ID   AAW51200 standard; peptide; 9 AA.
```

```
XX
AC   AAW51200;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /label= Nle
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;   95US-00387634.
XX
PR   09-MAY-1990;   90US-00520226.
PR   13-AUG-1992;   92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 15; Col 14; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8
```

```
RESULT 122
AAW51207
ID   AAW51207 standard; peptide; 9 AA.
XX
AC   AAW51207;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;   95US-00387634.
XX
PR   09-MAY-1990;   90US-00520226.
PR   13-AUG-1992;   92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 22; Col 14; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
```

```
              :|::|:||
Db          1 YQWAVGHL 8


RESULT 123
AAW51212
ID   AAW51212 standard; peptide; 9 AA.
XX
AC   AAW51212;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Litorin (Phe8Leu).
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyroglutamic acid"
FT   Modified-site   9
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;   95US-00387634.
XX
PR   09-MAY-1990;   90US-00520226.
PR   13-AUG-1992;   92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Disclosure; Col 7-8; 11pp; English.
XX
CC   The invention relates to peptides derived from litorin, neuromedin B,
CC   neuromedin C, bombesin (the last 10 amino acids) and human GRP (last 10
CC   amino acids). They may be used for treating cancer, for preventing
CC   proliferation of smooth muscle, for suppressing appetite, for stimulating
CC   pancreatic secretion or for suppressing cravings for alcohol. The present
CC   sequence represents a litorin-derived peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 124
AAW51209
ID   AAW51209 standard; peptide; 9 AA.
XX
AC   AAW51209;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   9
FT                   /label= Nle
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;   95US-00387634.
XX
PR   09-MAY-1990;   90US-00520226.
PR   13-AUG-1992;   92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 24; Col 14; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 YQWAVGHL 8


RESULT 125
AAW51194
ID   AAW51194 standard; peptide; 9 AA.
XX
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AC   AAW51194;
XX
DT   07-AUG-1998  (first entry)
XX
DE   Peptide derived from litorin or bombesin useful for treating cancer.
XX
KW   Benign; malignant; proliferation; cancer; litorin; bombesin; appetite;
KW   pancreatic secretion; neuromedin B; neuromedin C; GRP;
KW   gastrin-releasing peptide.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form residue, optionally D-p-chlorophenyl-
FT                   alanine"
FT   Modified-site   9
FT                   /note= "C-terminal amide"
XX
PN   US5767236-A.
XX
PD   16-JUN-1998.
XX
PF   13-FEB-1995;   95US-00387634.
XX
PR   09-MAY-1990;   90US-00520226.
PR   13-AUG-1992;   92US-00929306.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Moreau J,  Kim SH;
XX
DR   WPI; 1998-361783/31.
XX
PT   New linear peptide compounds derived from, litorin or bombesin - are
PT   useful, e.g., for treating cancer, suppressing appetite or stimulating
PT   pancreatic secretion.
XX
PS   Claim 6; Col 13; 11pp; English.
XX
CC   The invention relates to therapeutic peptides of formula: R1R2A1-A2-A3-
CC   A4-A5-A6-A7-A8-A9-R3, where A1 = a D-isomer selected from Trp, beta-Nal
CC   (3-(beta-naphthyl)-alanine), Phe or p-X-Phe; X = Cl, F, Br, NO2, OH or Me
CC   ; A2 = Gln; A3 = a D- or L-isomer selected from beta-Nal, Trp, Phe or p-X
CC   -Phe; A4 = Ala, Val, Leu, Ile, Nle or alpha-aminobutyric acid; A5 = Ala,
CC   Val, Leu, Ile, Nle, Thr or alpha-aminobutyric acid; A6 = Gly, Sar
CC   (sarcosine), p-Ala, or a D-isomer selected from Ala, N-Me-Ala, Trp or
CC   beta-Nal; A7 = His, 1-Me-His, 3-Me-His or Lys; A8 = Leu, Ile, Val, Nle,
CC   alpha-aminobutyric acid, Trp, beta -Nal, Phe or p-X-Phe; A9 = Met, Met-
CC   oxide, Leu, Ile, Nle, alpha-aminobutyric acid or Cys; R1, R2 = H, 1-12C
CC   alkyl, 7-10C phenylalkyl or COE1; E1 = 1-20C alkyl, 3-20C alkenyl, 3-20C
CC   alkynyl, phenyl, 3,4-dihydroxyphenylalkyl, naphthyl or 7-10C phenylalkyl;
CC   R3 = OH, NH2, 1-12C alkoxy, 7-10C phenylalkoxy, 11-20C naphthylalkoxy, 1-
CC   12C alkylamino, 7-10C phenylalkylamino or 11-20C naphthylalkylamino;
CC   provided that when one of R1 or R2 is COE1, then the other is H. The
CC   peptides are derived from litorin, neuromedin B,neuromedin C, bombesin
CC   (the last 10 amino acids) and human GRP (last 10 amino acids). They may
CC   be used for treating cancer, for preventing proliferation of smooth
CC   muscle, for suppressing appetite, for stimulating pancreatic secretion or
CC   for suppressing cravings for alcohol. The present sequence represents a
CC   specifically claimed peptide
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8
```

```
RESULT 126
AAW54742
ID   AAW54742 standard; peptide; 9 AA.
XX
AC   AAW54742;
XX
DT   25-SEP-1998  (first entry)
XX
DE   Peptide from HPV 18 E7 (7-15).
XX
KW   Mannose; antigen; antigen-presenting cell; mannosylated peptide; T cell;
KW   vaccine; treatment.
XX
OS   Synthetic.
XX
PN   WO9813378-A1.
XX
PD   02-APR-1998.
XX
PF   25-SEP-1997;   97WO-NL000536.
XX
PR   26-SEP-1996;   96EP-00202701.
XX
PA   (UYLE-) RIJKSUNIV LEIDEN.
XX
PI   Koning F,  Drijfhout JW;
XX
DR   WPI; 1998-230631/20.
XX
PT   Increasing uptake and presentation of antigen(s) - by adding mannose
PT   residue(s) to antigen for increasing T cell response, useful in, e.g.
PT   vaccines against viral infection(s).
XX
PS   Disclosure; Page 36; 47pp; English.
XX
CC   The peptides AAW54559-W54809 are examples of peptides to which at least 1
CC   (preferably 2) mannose can be attached to increase their uptake as
CC   antigens by antigen-presenting cells. Uptake of agonist mannosylated
CC   peptides will increase the T cell response, whereas uptake of antagonist
CC   peptides blocks the T cell response. Blocking binding of immunogenic
CC   autoantigens can be used in treatment of type I diabetes, rheumatoid
CC   arthritis, graft rejection etc., also to induce T-cell non-
CC   responsiveness. Vaccines containing mannosylated antigen are used to
CC   prevent or treat infections by, e.g. bacteria, viruses, fungi, helminths
CC   and parasites
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 LQDIVLHL 9


RESULT 127
AAY17045
ID   AAY17045 standard; peptide; 9 AA.
XX
AC   AAY17045;
XX
DT   20-JUL-1999  (first entry)
XX
DE   HPV antigenic peptide.
XX
KW   Conjugate peptide; heat shock protein; hsp; phage display library; virus;
KW   surface protein; tethering peptide; chaperone process; cytokine; cancer;
KW   neoplastic disease; infectious disease; bacterium; immune system; fungus;
KW   acquired immune deficiency; autoimmune disease.
XX
OS   Synthetic.
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XX
PN   WO9922761-A1.
XX
PD   14-MAY-1999.
XX
PF   22-OCT-1998;   98WO-US022335.
XX
PR   31-OCT-1997;   97US-00961707.
XX
PA   (SLOK ) SLOAN KETTERING INST CANCER RES.
XX
PI   Rothman JE,  Mayhew M,  Hoe MH,  Houghton A,  Hartl U,  Ouerfelli O;
PI   Moroi Y;
XX
DR   WPI; 1999-313177/26.
XX
PT   Identifying peptides which bind heat shock proteins.
XX
PS   Example; Page 30; 155pp; English.
XX
CC   The invention relates to conjugate peptides engineered to noncovalently
CC   bind to heat shock proteins (hsp). A method of identifying a hsp binding
CC   peptide comprises (a) contacting a phage display library having
CC   bacteriophage expressing, in a surface protein, inserted peptides with a
CC   hsp target, and bound to a benzoquinone ansamycin antibiotic (BAA), in a
CC   physiologic binding buffer; (b) isolating a phage binding to the hsp
CC   target; and (c) identifying the inserted peptide expressed. The peptides
CC   which bind to a hsp can be used as tethering peptides for a hsp which may
CC   serve as an accessory in a chaperone process and/or may comprise a
CC   cytokine. They can also be coupled to antigens to induce an immune
CC   response. Such compositions can be used for treating neoplastic disease,
CC   e.g. cancers, infectious diseases, e.g. diseases caused by a bacterium,
CC   virus, protozoan, mycoplasma, fungus, yeast, parasite or prion, or a
CC   disease of the immune system, e.g. acquired immune deficiencies or
CC   autoimmune diseases
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 LQDIVLHL 9


RESULT 128
AAW92738
ID   AAW92738 standard; peptide; 9 AA.
XX
AC   AAW92738;
XX
DT   20-MAR-2003  (revised)
DT   30-APR-1999  (first entry)
XX
DE   Bombesin peptide analogue #4.
XX
KW   Bombesin; gastrin releasing peptide; GRP; GRF; litorin; proliferation;
KW   growth hormone releasing factor; treatment; benign; malignant; tissue;
KW   small-cell lung carcinoma; atherosclerosis; gastrointestinal disorder;
KW   diabetes; diabetes related retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Residue is pyroglutamate"
FT   Misc-difference 8. .9
FT                   /note= "This sequence has a non-peptidyl bond (i.e.
FT                   CH2yNH), rather than a peptidyl (i.e. COyNH) between the
FT                   Leu and Leu residues"
FT   Modified-site   9
FT                   /note= "C-terminal amide"
XX
PN   US5877277-A.
XX
PD   02-MAR-1999.
XX
PF   10-NOV-1994;   94US-00337127.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Kim SH,  Coy DH,  Moreau J;
XX
DR   WPI; 1999-189718/16.
XX
PT   New peptides - useful for treating benign or malignant tissue
PT   proliferation, gastrointestinal disorders and diabetes.
XX
PS   Disclosure; Col 29-30; 22pp; English.
XX
CC   This invention describes novel peptides which are analogues of litorin or
CC   the 10 amino acid carboxy-terminal region of mammalian gastrin releasing
CC   peptide or the 10 amino acid carboxy-terminal region of amphibian
CC   bombesin of formula (R1)(R2)A1-A2-Trp-A4-A5-A6-A7-W where A1 = D-isomer
CC   of p-X-Phe, Trp or beta-Nal; X = F, Cl, Br, NO2, OH, H or Me; A2 = Gly,
CC   Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys, beta-Nal, His, 1-
CC   methyl-His or 3-methyl-His; A4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle,
CC   alpha-aminobutyric acid, Met, p-X Phe, Trp, Cys or beta-Nal; A5 = Gln,
CC   Asn, Gly, Ala, Leu, Ile, Nle, alpha-aminobutyric acid, Met, Val, p-X-Phe,
CC   Trp, Thr or beta-Nal; A6 = Sar, Gly or D-isomer of Ala, N-methyl-Ala,
CC   Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys or beta-Nal; A7 = His or
CC   1-methyl or 3-methyl-His; W = -N(R3)-CH(Z1)-R4- CH(Z2)-C(=O)V; R4 = CH2NH
CC   ; Z1, Z2 = Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe,
CC   Trp, Cys, Met, Pro, HyPro or cyclohexylAla; V = OR5 or NR6R7; R3, R5, R6,
CC   R7 = H, lower alkyl, phenyl(lower alkyl) or naphthyl(lower alkyl); R1, R2
CC   = H, 112C alkyl, 7-10C phenylalkyl or COE1; where R1 and R2 are bonded to
CC   the N-terminal amino acid of the peptide; E1 = 1-20C alkyl, 3-20C
CC   alkenyl, 3-20C alkynyl, Ph, naphthyl or 7-10C phenylalkyl; provided that
CC   when 1 of R1 and R2 is COE1, the other must be H. The peptides can be
CC   used for treating benign or malignant proliferation of tissue e.g. small-
CC   cell lung carcinoma, atherosclerosis, gastrointestinal disorders, and
CC   diabetes or diabetes related retinopathy. AAW92735-W92742 represent
CC   bombesin peptide analogues used in the method of the invention. (Updated
CC   on 20-MAR-2003 to correct PR field.)
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 129
AAY44955
ID   AAY44955 standard; peptide; 9 AA.
XX
```

```
AC   AAY44955;
XX
DT   23-MAY-2000  (first entry)
XX
DE   Human papilloma virus antigenic peptide-3.
XX
KW   Human papilloma virus antigenic peptide; target antigen;
KW   KDEL receptor inhibitor; heat shock protein; immune response;
KW   oligomerisation domain; neoplasia; sarcoma; lymphoma; leukaemia;
KW   melanoma; carcinoma; glioblastoma; astromytoma; oncogene;
KW   infectious disease; allergy; autoimmune disease.
XX
OS   Human papillomavirus.
XX
PN   WO200006729-A1.
XX
PD   10-FEB-2000.
XX
PF   28-JUL-1999;   99WO-US017147.
XX
PR   29-JUL-1998;   98US-00124671.
XX
PA   (SLOK ) SLOAN KETTERING INST CANCER RES.
XX
PI   Rothman JE,  Mayhew M,  Hoe MH;
XX
DR   WPI; 2000-195296/17.
XX
PT   Inhibitors of the KDEL receptor which comprises an oligomerization domain
PT   useful for promoting secretion of proteins which are normally retained
PT   within the cell.
XX
PS   Disclosure; Page 22; 87pp; English.
XX
CC   The patent discloses the use of KDEL receptor inhibitor to promote
CC   secretion of proteins that are normally retained within the cell such as
CC   heat shock proteins by inhibiting KDEL receptor-mediated return of
CC   protein complexes to endoplasmic reticulum. This makes the secreted heat
CC   shock proteins more accessible to the immune system and improves immune
CC   response to a target antigen. The inhibitor protein comprises several
CC   subunits where each subunit comprises an oligomerisation domain and has
CC   at its carboxy terminus a region which binds to a KDEL receptor. The
CC   target antigen may be associated with diseases including neoplasia such
CC   as sarcoma, lymphoma, leukemia, melanoma, carcinoma, glioblastoma and
CC   astromytoma, with defective tumour suppressor genes, oncogenes,
CC   infectious diseases, allergy or autoimmune diseases. The present sequence
CC   is human papillomavirus antigenic peptide. This serves as the target
CC   antigen for compositions comprising a KDEL receptor inhibitor. The target
CC   antigen forms a complex with a heat shock protein and the heat shock
CC   protein contains a ligand sequence which binds to a KDEL receptor
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 LQDIVLHL 9


RESULT 130
AAB96028
ID   AAB96028 standard; peptide; 9 AA.
XX
AC   AAB96028;
XX
DT   25-JUN-2001  (first entry)
XX
DE   HPV 18 E7 A2 MHC-binding epitope SEQ ID 144.
XX
KW   Epitope; tumour antigen; antiviral; immunostimulatory; cervical cancer;
KW   human papillomavirus-associated disease; condyloma; cervical dysplasia;
KW   cervical dysplasia; major histocompatibility complex; MHC I.
XX
OS   Human papillomavirus.
XX
PN   WO200119408-A1.
XX
PD   22-MAR-2001.
XX
PF   18-SEP-2000; 2000WO-US025559.
XX
PR   16-SEP-1999;   99US-00398534.
PR   16-SEP-1999;   99US-0154665P.
PR   09-DEC-1999;   99US-00458173.
PR   09-DEC-1999;   99US-0169846P.
XX
PA   (ZYCO-) ZYCOS INC.
XX
PI   Hedley ML,  Urban RC,  Chicz RM;
XX
DR   WPI; 2001-265996/27.
XX
PT   Novel nucleic acids encoding polyepitope polypeptides containing multiple
PT   epitopes from one or more proteins, useful for treating tumors and as
PT   vaccines against pathogenic agents.
XX
PS   Disclosure; Page 23; 64pp; English.
XX
CC   This invention relates to polynucleotides encoding a hybrid polypeptide
CC   comprising a signal sequence and three segments that are either
CC   contiguous or separated by a spacer amino acid or spacer peptide. The
CC   invention specifically details polynucleotides encoding a polyepitope
CC   peptide where the peptide segments are tumour antigens or a naturally
CC   occurring protein of a pathogenic agent. The polyepitope peptides exhibit
CC   antiviral and immunostimulatory activity. The polynucleotide and
CC   polyepitope peptides are useful for eliciting an immune response in a
CC   mammal. The polynucleotide and protein are useful as vaccines for
CC   treating tumours and pathogenic infections. The polynucleotide is also
CC   useful for preventing or treating human papillomavirus (HPV)-associated
CC   diseases, particularly exophytic condyloma, flat condyloma, cervical
CC   cancer, respiratory papilloma, conjunctival papilloma, genital-tract HPV
CC   infection, cervical dysplasia, high grade squamous intraepithelial
CC   lesions, and anal HPV infection. The polynucleotide and polypeptide are
CC   useful for generating or enhancing prophylactic or therapeutic immune
CC   response against pathogens, tumours or autoimmune diseases in a
CC   population of individuals having diverse MHC allotypes, as positive
CC   controls in T cell stimulation assays in vitro, and as tools to
CC   understand processing of epitopes within cells. Peptides AAB95894 -
CC   AAB96037 and AAB96044 - AAB96048 represent major histocompatibility
CC   complex I (MHC I) associated tumour and pathogen antigens. The peptides
CC   can be used as part of the polyepitope proteins of the invention. Also
CC   included are examples of the polyepitope proteins represented by AAB96050
CC   - AAB96052, and localisation signal peptides AAB96038 - AAB96043 and
CC   AAB96049 which can be used in the construction of the polyepitope
CC   peptides
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 LQDIVLHL 9


RESULT 131
ABB06668
ID   ABB06668 standard; peptide; 9 AA.
XX
AC   ABB06668;
XX
```

```
DT   10-JUN-2002  (first entry)
XX
DE   Bombesin/gastrin-releasing peptide related peptide SEQ ID NO:7.
XX
KW   Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW   growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW   gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW   autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW   malignant proliferation; benign proliferation; pancreatic secretion;
KW   motility; amylase secretion suppression; appetite; muscular dystrophy;
KW   diabetes.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "pyroglutamic-acid"
FT   Modified-site   8. .9
FT                   /note= "non-peptidyl bond"
FT   Modified-site   9
FT                   /note= "amidated"
XX
PN   US6307017-B1.
XX
PD   23-OCT-2001.
XX
PF   02-MAR-1999;   99US-00260846.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2002-162970/21.
XX
PT   New antagonistic analogs of litoein and similar peptides, are useful for
PT   treating malignant or benign proliferation or gastrointestinal disorders.
XX
PS   Disclosure; Col 9; 29pp; English.
XX
CC   The present invention describes therapeutic peptides (A) or their salts
CC   of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC   having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC   mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC   cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC   ophthalmological activities and can be used as natural peptide
CC   antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC   has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
CC   cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC   incorporation of titrated thymidine into small cell lung cancer cells
CC   (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC   substance related to (A) acts as autocrine or paracrine mitotic factor,
CC   e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC   or disorders of gastric or pancreatic secretion or motility, e.g. to
CC   suppress secretion of amylase and to control appetite (particularly
CC   restoration of appetite in patients with cachexia). Antagonists of GRP
CC   also suppresses the release of growth hormone so can be used to slow down
CC   progression of muscular dystrophy and to treat diabetes (or associated
CC   retinopathy). The present sequence represents a peptide which is used in
CC   the exemplification of the present invention
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 132
ADD70041
ID   ADD70041 standard; peptide; 9 AA.
XX
AC   ADD70041;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #24.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form beta-Naphthylalanine"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH]"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 4; 23pp; English.
XX
```

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CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 133
ADD70005
ID   ADD70005 standard; peptide; 9 AA.
XX
AC   ADD70005;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #3.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH]"
FT   Modified-site   9
FT                   /note= "Amidated D-form Phe"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 4; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 134
ADD70008
ID   ADD70008 standard; peptide; 9 AA.
XX
AC   ADD70008;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #6.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form Cpa (not defined)"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH]"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
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PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 4; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 135
ADD70028
ID   ADD70028 standard; peptide; 9 AA.
XX
AC   ADD70028;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #15.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH])"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 12; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8


RESULT 136
ADD70011
ID   ADD70011 standard; peptide; 9 AA.
XX
AC   ADD70011;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #4.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
```

```
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH]"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 5; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 FQWAVGHL 8
```

```
RESULT 137
ADD70023
ID   ADD70023 standard; peptide; 9 AA.
XX
AC   ADD70023;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #10.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyro-Glu"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH])"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 12; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
```

```
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 138
ADD70010
ID   ADD70010 standard; peptide; 9 AA.
XX
AC   ADD70010;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/ litorin/GRP-derived peptide #2.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyro-Glu"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH]"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 5; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVGHL 8


RESULT 139
ADD70032
ID   ADD70032 standard; peptide; 9 AA.
XX
AC   ADD70032;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #19.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form Naphthylalanine"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH])"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
```

```
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 12; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 140
ADD70021
ID   ADD70021 standard; peptide; 9 AA.
XX
AC   ADD70021;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #8.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyro-Glu"
FT   Misc-difference 6
FT                   /note= "D-form residue"
FT   Modified-site   8. .9
FT                   /note= "Non-peptide bond (psi[CH2NH])"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 12; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+06;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 EQWAVAHL 8


RESULT 141
ADD70029
ID   ADD70029 standard; peptide; 9 AA.
XX
AC   ADD70029;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Bombesin/GRP-derived peptide #16.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "D-form Naphthylalanine"
FT   Modified-site   8. .9
```

```
FT                   /note= "Non-peptide bond (psi[CH2NH])"
FT   Modified-site   9
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 12; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is a peptide of the invention.
XX
SQ   Sequence 9 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 9;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              ||::|:||
Db          1 XQWAVGHL 8


RESULT 142
AAP96113
ID   AAP96113 standard; protein; 10 AA.
XX
AC   AAP96113;
XX
DT   25-MAR-2003  (revised)
DT   22-DEC-1990  (first entry)
XX
DE   Sequence of new neuromedin C deriv.
XX
KW   Bombesin antagonist; malignant disease; therapy; gastric acid secretion.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /label= OTHER
FT                   /note= "Benzyloxycarbonyl-Arg"
FT   Misc-difference 3
FT                   /label= OTHER
FT                   /note= "Lys(Benzyloxycarbonyl)"
FT   Misc-difference 4
FT                   /label= OTHER
FT                   /note= "D-Gln"
FT   Misc-difference 8
FT                   /label= OTHER
FT                   /note= "D-Ala"
FT   Misc-difference 10
FT                   /label= OTHER
FT                   /note= "Leu-OMe"
XX
PN   EP315367-A.
XX
PD   10-MAY-1989.
XX
PF   27-OCT-1988;   88EP-00310094.
XX
PR   02-NOV-1987;   87GB-00025598.
PR   15-FEB-1988;   88GB-00003478.
PR   06-JUN-1988;   88GB-00013355.
XX
PA   (ICIL ) IMPERIAL CHEM IND PLC.
XX
PI   Camble R,  Cotton R,  Dutta AS,  Hayward CF;
XX
DR   WPI; 1989-139341/19.
XX
PT   New Neuromedin C polypeptide derivs. - are potent bombesin antagonists
PT   used for treating malignant disease and conditions associated with
PT   gastrin or gastric acid secretion.
XX
PS   Disclosure; Page 929; 49pp; English.
XX
CC   It is a potent bombesin antagonist. It may be used for the treatment of
CC   e.g. malignant disease, conditions associated with the over-prodn. of
CC   bombesin and conditions associated with failure of normal physiological
CC   control of the regulation of gastric acid secretion. (Updated on 25-MAR-
CC   2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ   Sequence 10 AA;

  Query Match             100.0%;  Score 25;  DB 1;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 KQWAVAHL 10


RESULT 143
AAR04533
ID   AAR04533 standard; protein; 10 AA.
XX
AC   AAR04533;
XX
DT   25-MAR-2003  (revised)
DT   24-SEP-1990  (first entry)
XX
DE   Non-cyclic analogue of amphibian bombesin and mammalian GRP.
XX
KW   Mammalian gastrin releasing peptide; amphibian bombesin; cancer;
KW   therapeutic peptides.
```

```
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "D-p-Cl"
FT   Modified-site   9
FT                   /label= leucine psi[CH2NH]
XX
PN   WO9003980-A.
XX
PD   19-APR-1990.
XX
PF   14-OCT-1988;   88US-00257998.
XX
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau JP,  Taylor JE,  Kim SH;
XX
DR   WPI; 1990-147822/19.
XX
PT   New non-cyclic analogues of mammalian gastrin-releasing peptide - and
PT   amphibian bombesin, used for cancer treatment, e.g. small cell lung
PT   carcinoma, atherosclerosis and gastrointestinal disorders.
XX
PS   Claim 31; Page 61; 68pp; English.
XX
CC   C-terminal = NH2. The peptide has an active site and a binding site for
CC   binding to a target cell receptor, and has one of the following
CC   modifications: (a) a deletion of a residue within the active site and a
CC   modification of a residue outside of the active site; and (b) a
CC   replacement of 1 or 2 residues within the active site with a synthetic
CC   amino acid. On binding to its receptor, the analogue acts as a
CC   competitive inhibitor of the naturally occurrring peptide but due to the
CC   modifications, fails to exhibit the normal in vivo biological activity.
CC   The peptides are useful for the treatment of benign or malignant
CC   proliferation of tissues, eg cancers of the gastrointestinal tract,
CC   pancreatic cancer, colon cancer, lung cancer or breast cancer; for the
CC   treatment of atherosclerosis; and disorders of the gastrointestinal
CC   tissues. This peptide is a claimed example of a highly generic formula.
CC   See also AAR04525-R04533. (Updated on 25-MAR-2003 to correct PR field.)
CC   (Updated on 25-MAR-2003 to correct PA field.) (Updated on 25-MAR-2003 to
CC   correct PI field.)
XX
SQ   Sequence 10 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 FQWAVGHL 9


RESULT 144
AAW50618
ID   AAW50618 standard; peptide; 10 AA.
XX
AC   AAW50618;
XX
DT   27-AUG-2003  (revised)
DT   14-SEP-1998  (first entry)
XX
DE   Bombesin (last 10 amino acids).
XX
KW   Cancer; gastrin releasing peptide; neuromedin B; neuromedin C; bombesin;
KW   litorin; peptide analogue; colon; prostate; breast cancer.
XX
OS   Amphibia.
XX
PN   US5736517-A.
XX
PD   07-APR-1998.
XX
PF   08-JUN-1993;   93US-00073771.
XX
PR   15-SEP-1989;   89US-00408125.
PR   21-NOV-1989;   89US-00440039.
PR   09-MAY-1990;   90US-00520225.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Bogden AE,  Moreau J;
XX
DR   WPI; 1998-239254/21.
XX
PT   Treatment of cancer in mammals, particularly of the colon, prostate or
PT   breast - comprises the administration of a cell inhibiting peptide.
XX
PS   Disclosure; Fig 9; 24pp; English.
XX
CC   The invention relates to a method of treating cancer which involves
CC   administering a cancer cell inhibiting amount of an analogue of a
CC   naturally occurring biologically active peptide or a fragment thereof,
CC   the peptide being one of mammalian gastrin releasing peptide, neuromedin
CC   B, neuromedin C, amphibian bombesin or litorin. The peptides are useful
CC   in the treatment of mammalian, especially human cancers, particularly
CC   colon, prostatic, lung, breast and pancreatic cancer. The analogues can
CC   also be used to treat non-malignant proliferative diseases in humans. The
CC   present sequence represents the last 10 amino acids of amphibian
CC   bombesin. (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ   Sequence 10 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 NQWAVGHL 9


RESULT 145
AAB96029
ID   AAB96029 standard; peptide; 10 AA.
XX
AC   AAB96029;
XX
DT   25-JUN-2001  (first entry)
XX
DE   HPV 18 E7 A2 MHC-binding epitope SEQ ID 145.
XX
KW   Epitope; tumour antigen; antiviral; immunostimulatory; cervical cancer;
KW   human papillomavirus-associated disease; condyloma; cervical dysplasia;
KW   cervical dysplasia; major histocompatibility complex; MHC I.
XX
OS   Human papillomavirus.
XX
PN   WO200119408-A1.
XX
PD   22-MAR-2001.
XX
PF   18-SEP-2000; 2000WO-US025559.
XX
PR   16-SEP-1999;   99US-00398534.
PR   16-SEP-1999;   99US-0154665P.
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PR   09-DEC-1999;   99US-00458173.
PR   09-DEC-1999;   99US-0169846P.
XX
PA   (ZYCO-) ZYCOS INC.
XX
PI   Hedley ML,  Urban RC,  Chicz RM;
XX
DR   WPI; 2001-265996/27.
XX
PT   Novel nucleic acids encoding polyepitope polypeptides containing multiple
PT   epitopes from one or more proteins, useful for treating tumors and as
PT   vaccines against pathogenic agents.
XX
PS   Disclosure; Page 23; 64pp; English.
XX
CC   This invention relates to polynucleotides encoding a hybrid polypeptide
CC   comprising a signal sequence and three segments that are either
CC   contiguous or separated by a spacer amino acid or spacer peptide. The
CC   invention specifically details polynucleotides encoding a polyepitope
CC   peptide where the peptide segments are tumour antigens or a naturally
CC   occurring protein of a pathogenic agent. The polyepitope peptides exhibit
CC   antiviral and immunostimulatory activity. The polynucleotide and
CC   polyepitope peptides are useful for eliciting an immune response in a
CC   mammal. The polynucleotide and protein are useful as vaccines for
CC   treating tumours and pathogenic infections. The polynucleotide is also
CC   useful for preventing or treating human papillomavirus (HPV)-associated
CC   diseases, particularly exophytic condyloma, flat condyloma, cervical
CC   cancer, respiratory papilloma, conjunctival papilloma, genital-tract HPV
CC   infection, cervical dysplasia, high grade squamous intraepithelial
CC   lesions, and anal HPV infection. The polynucleotide and polypeptide are
CC   useful for generating or enhancing prophylactic or therapeutic immune
CC   response against pathogens, tumours or autoimmune diseases in a
CC   population of individuals having diverse MHC allotypes, as positive
CC   controls in T cell stimulation assays in vitro, and as tools to
CC   understand processing of epitopes within cells. Peptides AAB95894 -
CC   AAB96037 and AAB96044 - AAB96048 represent major histocompatibility
CC   complex I (MHC I) associated tumour and pathogen antigens. The peptides
CC   can be used as part of the polyepitope proteins of the invention. Also
CC   included are examples of the polyepitope proteins represented by AAB96050
CC   - AAB96052, and localisation signal peptides AAB96038 - AAB96043 and
CC   AAB96049 which can be used in the construction of the polyepitope
CC   peptides
XX
SQ   Sequence 10 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 LQDIVLHL 10


RESULT 146
ABB06675
ID   ABB06675 standard; peptide; 10 AA.
XX
AC   ABB06675;
XX
DT   10-JUN-2002  (first entry)
XX
DE   Amphibian bombesin peptide SEQ ID NO:14.
XX
KW   Amphibian; bombesin; gastrin-releasing peptide; GRP; GRF; litoein;
KW   growth hormone releasing factor; cytostatic; antiarteriosclerotic;
KW   gastrointestinal; antidiabetic; ophthalmological; atherosclerosis;
KW   autocrine mitotic factor; paracrine mitotic factor; cancer; gastric;
KW   malignant proliferation; benign proliferation; pancreatic secretion;
KW   motility; amylase secretion suppression; appetite; muscular dystrophy;
KW   diabetes.
XX
OS   Amphibia.
XX
PN   US6307017-B1.
XX
PD   23-OCT-2001.
XX
PF   02-MAR-1999;   99US-00260846.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2002-162970/21.
XX
PT   New antagonistic analogs of litoein and similar peptides, are useful for
PT   treating malignant or benign proliferation or gastrointestinal disorders.
XX
PS   Disclosure; Fig 2; 29pp; English.
XX
CC   The present invention describes therapeutic peptides (A) or their salts
CC   of 7-10 amino acids (aa) that are analogues of the natural peptides,
CC   having C-terminal Met, litoein or the 10 aa C-terminal region of either
CC   mammalian gastrin-releasing peptide (GRP) or amphibian bombesin. (A) have
CC   cytostatic, antiarteriosclerotic, gastrointestinal, antidiabetic and
CC   ophthalmological activities and can be used as natural peptide
CC   antagonists. The peptide pyroGlu-Gln-Trp-Ala-Val-Gly-His-Leu-statine-NH2
CC   has IC50 for inhibition of binding of GRP to the bombesin receptor on 3T3
CC   cells of 150 nM and IC50 for inhibition of bombesin-stimulated
CC   incorporation of titrated thymidine into small cell lung cancer cells
CC   (NCI-H69) of 165 nM. (A) can be used to treat conditions where the
CC   substance related to (A) acts as autocrine or paracrine mitotic factor,
CC   e.g. malignant or benign proliferation, e.g. cancer or atherosclerosis;
CC   or disorders of gastric or pancreatic secretion or motility, e.g. to
CC   suppress secretion of amylase and to control appetite (particularly
CC   restoration of appetite in patients with cachexia). Antagonists of GRP
CC   also suppresses the release of growth hormone so can be used to slow down
CC   progression of muscular dystrophy and to treat diabetes (or associated
CC   retinopathy). The present sequence represents a peptide which is used in
CC   the exemplification of the present invention
XX
SQ   Sequence 10 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 NQWAVGHL 9


RESULT 147
ADD70036
ID   ADD70036 standard; peptide; 10 AA.
XX
AC   ADD70036;
XX
DT   15-JAN-2004  (first entry)
XX
```

```
DE   Therapeutic peptide Bombesin, C-terminus.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Synthetic.
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Fig 2; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is one of the naturally occurring peptides upon which the
CC   peptides of the invention are based.
XX
SQ   Sequence 10 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 10;
  Best Local Similarity   50.0%;  Pred. No. 1.4e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 NQWAVGHL 9


RESULT 148
AAY82106
ID   AAY82106 standard; peptide; 11 AA.
XX
AC   AAY82106;
XX
DT   02-JUN-2000  (first entry)
XX
DE   Bombesin homologue peptide #1.
XX
KW   Bombesin; technetium-99m label; radioimaging; radiodiagnostic;
KW   mercaptoacetyltriglycine; MAG3; radiolabelling; nuclear medicine;
KW   peptide synthesis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 4
FT                   /note= "D-form residue"
FT   Modified-site   11
FT                   /note= "amidated"
XX
PN   CA2225326-A1.
XX
PD   19-JUN-1999.
XX
PF   19-DEC-1997;   97CA-02225326.
XX
PR   19-DEC-1997;   97CA-02225326.
XX
PA   (OKAR/) OKARVI S M.
PA   (WISH/) WISHART D.
PA   (VDOM/) VAN DOMESELAAR G.
PA   (SURE/) SURESH M R.
XX
PI   Okarvi SM,  Wishart D,  Van Domeselaar G,  Suresh MR;
XX
DR   WPI; 2000-238088/21.
XX
PT   Preparation of 99mTc-labelled peptides, used in radioimaging, comprises
PT   allowing a mercaptoacetyltriglycine technetium chelate to be attached
PT   directly onto a growing peptide chain.
XX
PS   Disclosure; Page 5; 27pp; English.
XX
CC   The present invention describes the preparation of 99mTc-labelled
CC   peptides comprising a simple solid phase synthetic approach which allows
CC   a mercaptoacetyltriglycine (MAG3) technetium chelate to be attached
CC   directly onto a growing peptide chain using conventional solid phase
CC   peptide chemistry. The method is used for preparing 99mTc-labelled
CC   peptides for use in radioimaging and radiodiagnostics. The process
CC   requires less purification steps than prior art, eliminates the need for
CC   solution-phase conjugation and avoids problems associated with non-
CC   specific chelator conjugation. The peptide-conjugates prepared can be
CC   efficiently labeled with 99mTc (92%), are highly resistant to cysteine
CC   challenge, are very stable to plasma and can bind with desired cellular
CC   targets. The present sequence represents a bombesin homologue peptide
CC   used in the exemplification of the present invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          4 FQWAVGHL 11


RESULT 149
AAB19953
ID   AAB19953 standard; peptide; 11 AA.
XX
AC   AAB19953;
XX
```

```
DT   19-MAR-2001  (first entry)
XX
DE   Bombesin analogue, used in peptide-dye conjugate.
XX
KW   Bombesin analogue; dye-peptide conjugate; diagnosis; imaging; therapy;
KW   tumour; atherosclerosis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO200071162-A2.
XX
PD   30-NOV-2000.
XX
PF   26-APR-2000; 2000WO-US011060.
XX
PR   20-MAY-1999;   99US-0135060P.
PR   04-JUN-1999;   99US-00325769.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Dorshow RB,  Bugaj JE,  Rajagopalan R;
XX
DR   WPI; 2001-061299/07.
XX
PT   Compositions used in diagnosis and therapy of e.g. tumors or
PT   atherosclerosis, comprise cyanine dye bioconjugates.
XX
PS   Example 6; Page 11; 38pp; English.
XX
CC   The present sequence is that of a bombesin analogue obtained by chemical
CC   synthesis. The peptide is used as a tumour-specific moiety in novel dye-
CC   peptide conjugates useful in diagnosis and therapy. Such conjugates
CC   include several cyanine dyes with a variety of bis- and tetrakis
CC   (carboxylic acid) homologues. Their small size allows more favorable
CC   delivery to tumour cells. The dye-peptide conjugates are useful for:
CC   localized therapy; optical tomographic, endoscopic, photoacoustic and
CC   sonofluorescent applications for the detection and treatment of tumours
CC   and other abnormalities; detection of the presence of tumours and other
CC   abnormalities by monitoring the blood clearance profile of the conjugates
CC   ; laser assisted guided surgery for the detection of small
CC   micrometastases; and for diagnosis of atherosclerotic plaques and blood
CC   clots (all claimed). Fluorescence quenching is prevented by the use of
CC   biocompatible organic solvents
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 150
AAB19954
ID   AAB19954 standard; peptide; 11 AA.
XX
AC   AAB19954;
XX
DT   19-MAR-2001  (first entry)
XX
DE   Bombesin analogue, used in peptide-dye conjugate.
XX
KW   Bombesin analogue; dye-peptide conjugate; diagnosis; imaging; therapy;
KW   tumour; atherosclerosis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO200071162-A2.
XX
PD   30-NOV-2000.
XX
PF   26-APR-2000; 2000WO-US011060.
XX
PR   20-MAY-1999;   99US-0135060P.
PR   04-JUN-1999;   99US-00325769.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Dorshow RB,  Bugaj JE,  Rajagopalan R;
XX
DR   WPI; 2001-061299/07.
XX
PT   Compositions used in diagnosis and therapy of e.g. tumors or
PT   atherosclerosis, comprise cyanine dye bioconjugates.
XX
PS   Example 6; Page 11; 38pp; English.
XX
CC   The present sequence is that of a bombesin analogue obtained by chemical
CC   synthesis. The peptide is used as a tumour-specific moiety in novel dye-
CC   peptide conjugates useful in diagnosis and therapy. Such conjugates
CC   include several cyanine dyes with a variety of bis- and tetrakis
CC   (carboxylic acid) homologues. Their small size allows more favorable
CC   delivery to tumour cells. The dye-peptide conjugates are useful for:
CC   localized therapy; optical tomographic, endoscopic, photoacoustic and
CC   sonofluorescent applications for the detection and treatment of tumours
CC   and other abnormalities; detection of the presence of tumours and other
CC   abnormalities by monitoring the blood clearance profile of the conjugates
CC   ; laser assisted guided surgery for the detection of small
CC   micrometastases; and for diagnosis of atherosclerotic plaques and blood
CC   clots (all claimed). Fluorescence quenching is prevented by the use of
CC   biocompatible organic solvents
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 151
AAB69152
ID   AAB69152 standard; peptide; 11 AA.
XX
AC   AAB69152;
XX
DT   25-APR-2001  (first entry)
XX
DE   Bombesin analogue peptide SEQ ID NO:2.
XX
KW   Optical modality; cyanine dye; imaging; diagnosis; detection; tumour;
KW   optical diagnostic imaging; therapy; cytostatic; blood clot;
KW   atherosclerotic plaque; photodynamic therapy; LAGS; micrometastasis;
KW   laser assisted guided surgery.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "amidated"
XX
PN   US6180085-B1.
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XX
PD   30-JAN-2001.
XX
PF   18-JAN-2000; 2000US-00484318.
XX
PR   18-JAN-2000; 2000US-00484318.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-201896/20.
XX
PT   Composition useful for imaging, diagnosis and therapy of various diseased
PT   states comprises cyanine dyes that absorb and emit light in near infrared
PT   region of electromagnetic spectrum.
XX
PS   Example 9; Col 14; 12pp; English.
XX
CC   The present invention describes a composition which comprises cyanine
CC   dyes (I). (I) has cytostatic activity. (I) is useful for performing a
CC   diagnostic or therapeutic procedure, e.g. for diagnosing atherosclerotic
CC   plaques and blood clots, and for localised therapy, photodynamic therapy
CC   and laser assisted guided surgery (LAGS) for the detection of
CC   micrometastases. (I) are also useful for imaging, diagnosis and therapy
CC   of various diseased states, for optical diagnostic imaging and therapy,
CC   in endoscopic applications for the detection of tumours and other
CC   abnormalities, for photoacoustic tumour imaging, detection and therapy
CC   and for sonofluorescence tumour imaging, detection and therapy. (I)
CC   prevent dye aggregation in solution predisposed to form dendrimers,
CC   capable of absorbing or emitting beyond 800 nm, have good photophysical
CC   properties, and have tissue-specific targeting capability. The present
CC   sequence represents a peptide which is used in an example from the
CC   present invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 152
AAB69153
ID   AAB69153 standard; peptide; 11 AA.
XX
AC   AAB69153;
XX
DT   25-APR-2001  (first entry)
XX
DE   Bombesin analogue peptide SEQ ID NO:3.
XX
KW   Optical modality; cyanine dye; imaging; diagnosis; detection; tumour;
KW   optical diagnostic imaging; therapy; cytostatic; blood clot;
KW   atherosclerotic plaque; photodynamic therapy; LAGS; micrometastasis;
KW   laser assisted guided surgery.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "amidated"
XX
PN   US6180085-B1.
XX
PD   30-JAN-2001.
XX
PF   18-JAN-2000; 2000US-00484318.
XX
PR   18-JAN-2000; 2000US-00484318.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-201896/20.
XX
PT   Composition useful for imaging, diagnosis and therapy of various diseased
PT   states comprises cyanine dyes that absorb and emit light in near infrared
PT   region of electromagnetic spectrum.
XX
PS   Example 9; Col 14; 12pp; English.
XX
CC   The present invention describes a composition which comprises cyanine
CC   dyes (I). (I) has cytostatic activity. (I) is useful for performing a
CC   diagnostic or therapeutic procedure, e.g. for diagnosing atherosclerotic
CC   plaques and blood clots, and for localised therapy, photodynamic therapy
CC   and laser assisted guided surgery (LAGS) for the detection of
CC   micrometastases. (I) are also useful for imaging, diagnosis and therapy
CC   of various diseased states, for optical diagnostic imaging and therapy,
CC   in endoscopic applications for the detection of tumours and other
CC   abnormalities, for photoacoustic tumour imaging, detection and therapy
CC   and for sonofluorescence tumour imaging, detection and therapy. (I)
CC   prevent dye aggregation in solution predisposed to form dendrimers,
CC   capable of absorbing or emitting beyond 800 nm, have good photophysical
CC   properties, and have tissue-specific targeting capability. The present
CC   sequence represents a peptide which is used in an example from the
CC   present invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 153
AAB71697
ID   AAB71697 standard; peptide; 11 AA.
XX
AC   AAB71697;
XX
DT   14-MAY-2001  (first entry)
XX
DE   Bombesin analog.
XX
KW   Indocyanine dye; diagnosis; atherosclerosis; cancer; micrometastases.
XX
OS   Synthetic.
XX
PN   US6180087-B1.
XX
PD   30-JAN-2001.
XX
PF   18-JAN-2000; 2000US-00484320.
XX
PR   18-JAN-2000; 2000US-00484320.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-225779/23.
XX
PT   Novel indocyanine dyes that absorb and emit light in the near infrared
PT   region of electromagnetic spectrum, useful for imaging, diagnosis and
PT   therapy of various diseased states.
XX
```

```
PS   Example 9; Col 14; 16pp; English.
XX
CC   The present invention relates to a composition with indocyanine dyes. The
CC   invention is useful for performing a diagnostic or therapeutic procedure,
CC   e.g. for diagnosing atherosclerotic plaques and blood clots, and for
CC   localized therapy photodynamic therapy and laser assisted guided surgery
CC   (LAGS) for the detection of micrometastases
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 154
AAB71698
ID   AAB71698 standard; peptide; 11 AA.
XX
AC   AAB71698;
XX
DT   14-MAY-2001  (first entry)
XX
DE   Bombesin analog.
XX
KW   Indocyanine dye; diagnosis; atherosclerosis; cancer; micrometastases.
XX
OS   Synthetic.
XX
PN   US6180087-B1.
XX
PD   30-JAN-2001.
XX
PF   18-JAN-2000; 2000US-00484320.
XX
PR   18-JAN-2000; 2000US-00484320.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-225779/23.
XX
PT   Novel indocyanine dyes that absorb and emit light in the near infrared
PT   region of electromagnetic spectrum, useful for imaging, diagnosis and
PT   therapy of various diseased states.
XX
PS   Example 9; Col 14; 16pp; English.
XX
CC   The present invention relates to a composition with indocyanine dyes. The
CC   invention is useful for performing a diagnostic or therapeutic procedure,
CC   e.g. for diagnosing atherosclerotic plaques and blood clots, and for
CC   localized therapy photodynamic therapy and laser assisted guided surgery
CC   (LAGS) for the detection of micrometastases
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 155
AAB70512
ID   AAB70512 standard; peptide; 11 AA.
XX
AC   AAB70512;
XX
DT   08-MAY-2001  (first entry)
XX
DE   Bombesin analogue sequence SEQ ID NO:3.
XX
KW   Octreotide; octreotate; bombesin; cholecystokinin; neurotensin;
KW   optical modality; cyanine dye; imagine; diagnosis; therapy; tumour;
KW   endoscopic application; detection; atherosclerotic plaque; blood clot;
KW   laser assisted guided surgery; LAGS; micrometastasis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "amidated"
XX
PN   US6180086-B1.
XX
PD   30-JAN-2001.
XX
PF   18-JAN-2000; 2000US-00484319.
XX
PR   18-JAN-2000; 2000US-00484319.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-234224/24.
XX
PT   Novel hydrophilic cyanine dyes absorb and emit light in the near infrared
PT   region of electromagnetic spectrum, useful for imaging, diagnosis and
PT   therapy of various diseased states.
XX
PS   Example 9; Col 13; 15pp; English.
XX
CC   The present invention describes a composition comprising hydrophilic
CC   cyanine dyes (I). Also described is a method for the preparation of (I).
CC   (I) is useful for performing a diagnostic or therapeutic procedure, e.g.
CC   for diagnosing atherosclerotic plaques and blood clots, and for localised
CC   therapy, photodynamic therapy and laser assisted guided surgery (LAGS)
CC   for the detection of micrometastases. The dyes are also useful for
CC   imaging, diagnosis and therapy of various diseased states, for optical
CC   diagnostic imaging and therapy, in endoscopic applications for the
CC   detection of tumours and other abnormalities, for photoacoustic tumour
CC   imaging, detection and therapy, and for sonofluorescence tumour imaging,
CC   detection and therapy. The dyes prevent dye aggregation in solution
CC   predisposed to form dendrimers, capable of absorbing or emitting beyond
CC   800 nm, possess desirable photophysical properties, and endowed with
CC   tissue-specific targeting capability. The present sequence represents a
CC   bombesin analogue which is used in an example from the present invention
CC   for the synthesis of octreotate
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 156
AAB70511
ID   AAB70511 standard; peptide; 11 AA.
XX
AC   AAB70511;
XX
DT   08-MAY-2001  (first entry)
```

```
XX
DE   Bombesin analogue sequence SEQ ID NO:2.
XX
KW   Octreotide; octreotate; bombesin; cholecystokinin; neurotensin;
KW   optical modality; cyanine dye; imagine; diagnosis; therapy; tumour;
KW   endoscopic application; detection; atherosclerotic plaque; blood clot;
KW   laser assisted guided surgery; LAGS; micrometastasis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "amidated"
XX
PN   US6180086-B1.
XX
PD   30-JAN-2001.
XX
PF   18-JAN-2000; 2000US-00484319.
XX
PR   18-JAN-2000; 2000US-00484319.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-234224/24.
XX
PT   Novel hydrophilic cyanine dyes absorb and emit light in the near infrared
PT   region of electromagnetic spectrum, useful for imaging, diagnosis and
PT   therapy of various diseased states.
XX
PS   Example 9; Col 13; 15pp; English.
XX
CC   The present invention describes a composition comprising hydrophilic
CC   cyanine dyes (I). Also described is a method for the preparation of (I).
CC   (I) is useful for performing a diagnostic or therapeutic procedure, e.g.
CC   for diagnosing atherosclerotic plaques and blood clots, and for localised
CC   therapy, photodynamic therapy and laser assisted guided surgery (LAGS)
CC   for the detection of micrometastases. The dyes are also useful for
CC   imaging, diagnosis and therapy of various diseased states, for optical
CC   diagnostic imaging and therapy, in endoscopic applications for the
CC   detection of tumours and other abnormalities, for photoacoustic tumour
CC   imaging, detection and therapy, and for sonofluorescence tumour imaging,
CC   detection and therapy. The dyes prevent dye aggregation in solution
CC   predisposed to form dendrimers, capable of absorbing or emitting beyond
CC   800 nm, possess desirable photophysical properties, and endowed with
CC   tissue-specific targeting capability. The present sequence represents a
CC   bombesin analogue which is used in an example from the present invention
CC   for the synthesis of octreotate
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 157
AAB73422
ID   AAB73422 standard; peptide; 11 AA.
XX
AC   AAB73422;
XX
DT   25-JUN-2001  (first entry)
XX
DE   Bombesin analogue peptide, SEQ ID NO:2.
XX
KW   Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
KW   optical diagnostic imaging; tumour detection; cancer; endoscopy;
KW   coronary angiography; atherosclerotic plaque; blood clot.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US6183726-B1.
XX
PD   06-FEB-2001.
XX
PF   18-JAN-2000; 2000US-00484321.
XX
PR   18-JAN-2000; 2000US-00484321.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-280428/29.
XX
PT   Composition containing bis-indocyanine dye and carrier, useful in
PT   diagnosis and therapy, e.g. of tumors, with the dye resistant to
PT   aggregation.
XX
PS   Example 9; Col 13; 15pp; English.
XX
CC   The invention relates to compositions comprising a hydrophilic bis-
CC   indocyanine dye with a heterocyclic group in the polymethine chain, and a
CC   pharmaceutically acceptable carrier or excipient. The invention also
CC   relates to diagnostic and therapeutic methods that involve administering
CC   the bis-indocyanine dye compositions to a human; and a method for making
CC   compositions of the invention by conjugating dyes to peptides or
CC   biomolecules by solid phase synthesis. The bis-indocyanine dye
CC   compositions are useful for optical tomographic imaging of organs;
CC   monitoring organ function; coronary angiography; fluorescent endoscopy;
CC   detection, imaging and therapy (photodynamic or localised) of tumours;
CC   laser-guided surgery (particularly for detecting micrometastases during
CC   laparoscopy); and photoacoustic and sonofluorescent methods. A particular
CC   application is diagnosis of atherosclerotic plaques and blood clots.
CC   Also, measuring the pattern of blood clearance of a composition of the
CC   invention can be used for diagnosis of tumours and other diseases. The
CC   bis-indocyanine dyes are designed not to aggregate in solution (by
CC   preventing intra- and inter-molecular hydrophobic interactions); to have
CC   many attachment sites near to the chromophore for formation of a
CC   dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
CC   and extended chromophore backbone that enhances the fluorescent quantum
CC   yield and extends the absorbance maximum to beyond 800 nm. Sequences
CC   AAB73421-AAB73426 represent synthetic peptides used in an exemplification
CC   to illustrate the use of bis-indocyanine dyes of the invention to prepare
CC   bioconjugates. The present sequence represents a bombesin analogue
CC   peptide
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 158
AAB73423
ID   AAB73423 standard; peptide; 11 AA.
XX
AC   AAB73423;
XX
DT   25-JUN-2001  (first entry)
```

```
XX
DE   Bombesin analogue peptide, SEQ ID NO:3.
XX
KW   Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
KW   optical diagnostic imaging; tumour detection; cancer; endoscopy;
KW   coronary angiography; atherosclerotic plaque; blood clot.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US6183726-B1.
XX
PD   06-FEB-2001.
XX
PF   18-JAN-2000; 2000US-00484321.
XX
PR   18-JAN-2000; 2000US-00484321.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-280428/29.
XX
PT   Composition containing bis-indocyanine dye and carrier, useful in
PT   diagnosis and therapy, e.g. of tumors, with the dye resistant to
PT   aggregation.
XX
PS   Example 9; Col 13; 15pp; English.
XX
CC   The invention relates to compositions comprising a hydrophilic bis-
CC   indocyanine dye with a heterocyclic group in the polymethine chain, and a
CC   pharmaceutically acceptable carrier or excipient. The invention also
CC   relates to diagnostic and therapeutic methods that involve administering
CC   the bis-indocyanine dye compositions to a human; and a method for making
CC   compositions of the invention by conjugating dyes to peptides or
CC   biomolecules by solid phase synthesis. The bis-indocyanine dye
CC   compositions are useful for optical tomographic imaging of organs;
CC   monitoring organ function; coronary angiography; fluorescent endoscopy;
CC   detection, imaging and therapy (photodynamic or localised) of tumours;
CC   laser-guided surgery (particularly for detecting micrometastases during
CC   laparoscopy); and photoacoustic and sonofluorescent methods. A particular
CC   application is diagnosis of atherosclerotic plaques and blood clots.
CC   Also, measuring the pattern of blood clearance of a composition of the
CC   invention can be used for diagnosis of tumours and other diseases. The
CC   bis-indocyanine dyes are designed not to aggregate in solution (by
CC   preventing intra- and inter-molecular hydrophobic interactions); to have
CC   many attachment sites near to the chromophore for formation of a
CC   dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
CC   and extended chromophore backbone that enhances the fluorescent quantum
CC   yield and extends the absorbance maximum to beyond 800 nm. Sequences
CC   AAB73421-AAB73426 represent synthetic peptides used in an exemplification
CC   to illustrate the use of bis-indocyanine dyes of the invention to prepare
CC   bioconjugates. The present sequence represents a bombesin analogue
CC   peptide
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 159
AAU07321
ID   AAU07321 standard; peptide; 11 AA.
XX
AC   AAU07321;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Bombesin analogue #2.
XX
KW   Bombesin; cytostatic; cyanine dye bioconjugate; diagnostic imaging;
KW   optical tomography; fluorescence endoscopy; micrometastasis; tumour;
KW   blood clearance profile monitoring; laser-assisted guided surgery;
KW   somatostatin subtype-2 positive tumour; SST2; atherosclerotic plaque;
KW   blood clot; photodynamic therapy; coronary angiography; photoacoustic;
KW   sonofluorescent; starburst dendrimer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO200152744-A1.
XX
PD   26-JUL-2001.
XX
PF   17-JAN-2001; 2001WO-US001468.
XX
PR   18-JAN-2000; 2000US-00484319.
PR   09-JAN-2001; 2001US-00757332.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-536388/59.
XX
PT   Cyanine dye bioconjugates, used for diagnostic imaging and therapy in
PT   e.g. optical tomography, fluorescence endoscopy, blood clearance
PT   monitoring, light scattering and photoacoustic imaging.
XX
PS   Example 9; Page 33; 78pp; English.
XX
CC   The invention relates to cyanine dye bioconjugates (I), used for
CC   diagnostic imaging and therapy. Also provided are methods for performing
CC   diagnostic or therapeutic procedures by administering (I) and a
CC   pharmaceutically acceptable carrier or excipient, activating (I) using
CC   light and performing the diagnostic or therapeutic procedure. (I) are
CC   used to perform diagnostic or therapeutic procedures including optical
CC   tomography or fluorescence endoscopy, blood clearance profile monitoring
CC   and laser-assisted guided surgery to detect micrometastases including
CC   somatostatin subtype-2 (SST-2) positive tumours. They are used to
CC   diagnose atherosclerotic plaques and blood clots; to administer localised
CC   therapy including photodynamic therapy; to visualise and detect tumours;
CC   They are also used in various biomedical applications including
CC   tomographic imaging or organs, monitoring of organ functions, coronary
CC   angiography, fluorescence endoscopy, detection, imaging and therapy of
CC   tumours, laser-assisted guided surgery, photoacoustic methods and
CC   sonofluorescent methods. (I) form starbust dendrimers that prevent
CC   aggregation in solution by preventing intramolecular and intermolecular
CC   ordered hydrophobic interactions and have multiple attachment sites near
CC   to the dye chromophore for ease of forming bioactive molecules. The
CC   presence of rigid and extended chromophore backbones enhances their
CC   fluorescence quantum yield and extends their maximum absorption beyond
CC   800 nm. Conjugation of biomolecules is readily achievable. The present
CC   sequence represents the amino acid sequence of bombesin analogue #2, used
CC   in the method of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
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                :|::|:||
Db          3 GQWAVGHL 10


RESULT 160
AAU07320
ID   AAU07320 standard; peptide; 11 AA.
XX
AC   AAU07320;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Bombesin analogue #1.
XX
KW   Bombesin; cytostatic; cyanine dye bioconjugate; diagnostic imaging;
KW   optical tomography; fluorescence endoscopy; micrometastasis; tumour;
KW   blood clearance profile monitoring; laser-assisted guided surgery;
KW   somatostatin subtype-2 positive tumour; SST2; atherosclerotic plaque;
KW   blood clot; photodynamic therapy; coronary angiography; photoacoustic;
KW   sonofluorescent; starbust dendrimer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO200152744-A1.
XX
PD   26-JUL-2001.
XX
PF   17-JAN-2001; 2001WO-US001468.
XX
PR   18-JAN-2000; 2000US-00484319.
PR   09-JAN-2001; 2001US-00757332.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-536388/59.
XX
PT   Cyanine dye bioconjugates, used for diagnostic imaging and therapy in
PT   e.g. optical tomography, fluorescence endoscopy, blood clearance
PT   monitoring, light scattering and photoacoustic imaging.
XX
PS   Example 9; Page 33; 78pp; English.
XX
CC   The invention relates to cyanine dye bioconjugates (I), used for
CC   diagnostic imaging and therapy. Also provided are methods for performing
CC   diagnostic or therapeutic procedures by administering (I) and a
CC   pharmaceutically acceptable carrier or excipient, activating (I) using
CC   light and performing the diagnostic or therapeutic procedure. (I) are
CC   used to perform diagnostic or therapeutic procedures including optical
CC   tomography or fluorescence endoscopy, blood clearance profile monitoring
CC   and laser-assisted guided surgery to detect micrometastases including
CC   somatostatin subtype-2 (SST-2) positive tumours. They are used to
CC   diagnose atherosclerotic plaques and blood clots; to administer localised
CC   therapy including photodynamic therapy; to visualise and detect tumours;
CC   They are also used in various biomedical applications including
CC   tomographic imaging or organs, monitoring of organ functions, coronary
CC   angiography, fluorescence endoscopy, detection, imaging and therapy of
CC   tumours, laser-assisted guided surgery, photoacoustic methods and
CC   sonofluorescent methods. (I) form starbust dendrimers that prevent
CC   aggregation in solution by preventing intramolecular and intermolecular
CC   ordered hydrophobic interactions and have multiple attachment sites near
CC   to the dye chromophore for ease of forming bioactive molecules. The
CC   presence of rigid and extended chromophore backbones enhances their
CC   fluorescence quantum yield and extends their maximum absorption beyond
CC   800 nm. Conjugation of biomolecules is readily achievable. The present
CC   sequence represents the amino acid sequence of bombesin analogue #1, used
CC   in the method of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
                :|::|:||
Db          3 GQWAVGHL 10


RESULT 161
AAG67682
ID   AAG67682 standard; peptide; 11 AA.
XX
AC   AAG67682;
XX
DT   26-NOV-2001  (first entry)
XX
DE   Amino acid sequence of a synthetic analogue of bombesin.
XX
KW   Fluorescence; organic solvent; indocyanine dye; imaging; disease therapy;
KW   optical diagnostic imaging; endoscopy; tumour;
KW   photoacoustic tumour imaging; sonofluorescence tumour imaging; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "this residue is amidated"
XX
PN   US6264920-B1.
XX
PD   24-JUL-2001.
XX
PF   10-AUG-2000; 2000US-00637518.
XX
PR   18-JAN-2000; 2000US-00484320.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-569877/64.
XX
PT   In vivo or in vitro fluorescence is restored by adding biocompatible
PT   organic solvents to new indocyanine dye compositions.
XX
PS   Example 7; Col 15; 15pp; English.
XX
CC   The specification describes a method for the restoration of in vivo or in
CC   vitro fluorescence. The method involves adding biocompatible organic
CC   solvents to compositions of indocyanine dyes. The dyes are of a formula
CC   given in the specification. The dyes prevent aggregation in solution, are
CC   predisposed to form dendrimers, absorb or emit beyond 800 nm, possess
CC   desirable photophysical properties, and show tissue-specific targeting
CC   capabilities. The method is used for imaging, diagnosis and therapy of
CC   various disease (particularly for optical diagnostic imaging and therapy,
CC   in endoscopic applications for the detection of tumours and other
CC   abnormalities, for localized therapy, photoacoustic tumour imaging,
CC   detection and therapy, and sonofluorescence tumour imaging, detection and
CC   therapy). The present sequence represents a bombesin analogue, which may
CC   be conjugated to dyes of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
                :|::|:||
Db          3 GQWAVGHL 10
```

```
RESULT 162
AAG67681
ID   AAG67681 standard; peptide; 11 AA.
XX
AC   AAG67681;
XX
DT   26-NOV-2001  (first entry)
XX
DE   Amino acid sequence of a synthetic analogue of bombesin.
XX
KW   Fluorescence; organic solvent; indocyanine dye; imaging; disease therapy;
KW   optical diagnostic imaging; endoscopy; tumour;
KW   photoacoustic tumour imaging; sonofluorescence tumour imaging; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "this residue is amidated"
XX
PN   US6264920-B1.
XX
PD   24-JUL-2001.
XX
PF   10-AUG-2000; 2000US-00637518.
XX
PR   18-JAN-2000; 2000US-00484320.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-569877/64.
XX
PT   In vivo or in vitro fluorescence is restored by adding biocompatible
PT   organic solvents to new indocyanine dye compositions.
XX
PS   Example 7; Col 15; 15pp; English.
XX
CC   The specification describes a method for the restoration of in vivo or in
CC   vitro fluorescence. The method involves adding biocompatible organic
CC   solvents to compositions of indocyanine dyes. The dyes are of a formula
CC   given in the specification. The dyes prevent aggregation in solution, are
CC   predisposed to form dendrimers, absorb or emit beyond 800 nm, possess
CC   desirable photophysical properties, and show tissue-specific targeting
CC   capabilities. The method is used for imaging, diagnosis and therapy of
CC   various disease (particularly for optical diagnostic imaging and therapy,
CC   in endoscopic applications for the detection of tumours and other
CC   abnormalities, for localized therapy, photoacoustic tumour imaging,
CC   detection and therapy, and sonofluorescence tumour imaging, detection and
CC   therapy). The present sequence represents a bombesin analogue, which may
CC   be conjugated to dyes of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 163
AAE07134
ID   AAE07134 standard; peptide; 11 AA.
XX
AC   AAE07134;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Bombesin analogue peptide used to synthesise peptide dye bioconjugate #1.
XX
KW   Cyanine dye bioconjugate; therapy; tumour detection; optical tomography;
KW   fluorescence endoscopy; blood clearance profile monitoring; cytostatic;
KW   laser-assisted guided surgery; micrometastasis; somatostatin subtype-2;
KW   SST-2; atherosclerosis; photodynamic therapy; organ function monitoring;
KW   tomographic imaging; coronary angiography; imaging; blood clot; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO200152746-A1.
XX
PD   26-JUL-2001.
XX
PF   17-JAN-2001; 2001WO-US001471.
XX
PR   18-JAN-2000; 2000US-00484321.
PR   09-JAN-2001; 2001US-00757333.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-502594/55.
XX
PT   Cyanine dye bioconjugates, used for diagnostic imaging and therapy in
PT   e.g. optical tomography, fluorescence endoscopy, blood clearance
PT   monitoring, light scattering and photoacoustic imaging.
XX
PS   Example 9; Page 34; 77pp; English.
XX
CC   The invention relates to compositions of cyanine dye bioconjugates with
CC   bioactive molecules for diagnosis and therapy, particularly, for
CC   visualisation and detection of tumours. Cyanine dye bioconjugates are
CC   used to perform diagnostic or therapeutic procedures including optical
CC   tomography or fluorescence endoscopy, blood clearance profile monitoring
CC   and laser-assisted guided surgery to detect micrometastases including
CC   somatostatin subtype-2 (SST-2) positive tumours. They are used to
CC   diagnose atherosclerotic plaques and blood clots. They are used to
CC   administer localised therapy including photodynamic therapy. They are
CC   used in various biomedical applications including tomographic imaging of
CC   organs, monitoring of organ functions, coronary angiography, detection,
CC   imaging and therapy of tumours, photoacoustic methods and sonofluorescent
CC   methods. The present sequence is a bombesin analogue peptide used in the
CC   synthesis of peptide dye bioconjugates
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 164
AAE07135
ID   AAE07135 standard; peptide; 11 AA.
XX
AC   AAE07135;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Bombesin analogue peptide used to synthesise peptide dye bioconjugate #2.
XX
KW   Cyanine dye bioconjugate; therapy; tumour detection; optical tomography;
```

```
KW   fluorescence endoscopy; blood clearance profile monitoring; cytostatic;
KW   laser-assisted guided surgery; micrometastasis; somatostatin subtype-2;
KW   SST-2; atherosclerosis; photodynamic therapy; organ function monitoring;
KW   tomographic imaging; coronary angiography; imaging; blood clot; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO200152746-A1.
XX
PD   26-JUL-2001.
XX
PF   17-JAN-2001; 2001WO-US001471.
XX
PR   18-JAN-2000; 2000US-00484321.
PR   09-JAN-2001; 2001US-00757333.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-502594/55.
XX
PT   Cyanine dye bioconjugates, used for diagnostic imaging and therapy in
PT   e.g. optical tomography, fluorescence endoscopy, blood clearance
PT   monitoring, light scattering and photoacoustic imaging.
XX
PS   Example 9; Page 34; 77pp; English.
XX
CC   The invention relates to compositions of cyanine dye bioconjugates with
CC   bioactive molecules for diagnosis and therapy, particularly, for
CC   visualisation and detection of tumours. Cyanine dye bioconjugates are
CC   used to perform diagnostic or therapeutic procedures including optical
CC   tomography or fluorescence endoscopy, blood clearance profile monitoring
CC   and laser-assisted guided surgery to detect micrometastases including
CC   somatostatin subtype-2 (SST-2) positive tumours. They are used to
CC   diagnose atherosclerotic plaques and blood clots. They are used to
CC   administer localised therapy including photodynamic therapy. They are
CC   used in various biomedical applications including tomographic imaging of
CC   organs, monitoring of organ functions, coronary angiography, detection,
CC   imaging and therapy of tumours, photoacoustic methods and sonofluorescent
CC   methods. The present sequence is a bombesin analogue peptide used in the
CC   synthesis of peptide dye bioconjugates
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 165
AAB73428
ID   AAB73428 standard; peptide; 11 AA.
XX
AC   AAB73428;
XX
DT   25-JUN-2001  (first entry)
XX
DE   Bombesin analogue peptide, SEQ ID NO:2.
XX
KW   Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
KW   optical diagnostic imaging; tumour detection; cancer; endoscopy;
KW   coronary angiography; atherosclerotic plaque; blood clot.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US6190641-B1.
XX
PD   20-FEB-2001.
XX
PF   18-JAN-2000; 2000US-00484323.
XX
PR   18-JAN-2000; 2000US-00484323.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-280460/29.
XX
PT   Novel indocyanine dyes that absorb and emit light in near infrared region
PT   of electromagnetic spectrum, useful for imaging, diagnosis and therapy of
PT   various diseased states.
XX
PS   Example 9; Col 14; 15pp; English.
XX
CC   The invention relates to compositions comprising a hydrophilic bis-
CC   indocyanine dye with a heterocyclic group in the polymethine chain, and a
CC   pharmaceutically acceptable carrier or excipient. The invention also
CC   relates to diagnostic and therapeutic methods that involve administering
CC   the bis-indocyanine dye compositions to a human; and a method for making
CC   compositions of the invention by conjugating dyes to peptides or
CC   biomolecules by solid phase synthesis. The bis-indocyanine dye
CC   compositions are useful for optical tomographic imaging of organs;
CC   monitoring organ function; coronary angiography; fluorescent endoscopy;
CC   detection, imaging and therapy (photodynamic or localised) of tumours;
CC   laser-guided surgery (particularly for detecting micrometastases during
CC   laparoscopy); and photoacoustic and sonofluorescent methods. A particular
CC   application is diagnosis of atherosclerotic plaques and blood clots.
CC   Also, measuring the pattern of blood clearance of a composition of the
CC   invention can be used for diagnosis of tumours and other diseases. The
CC   bis-indocyanine dyes are designed not to aggregate in solution (by
CC   preventing intra- and inter-molecular hydrophobic interactions); to have
CC   many attachment sites near to the chromophore for formation of a
CC   dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
CC   and extended chromophore backbone that enhances the fluorescent quantum
CC   yield and extends the absorbance maximum to beyond 800 nm. Sequences
CC   AAB73427-AAB73432 represent synthetic peptides used in an exemplification
CC   to illustrate the use of bis-indocyanine dyes of the invention to prepare
CC   bioconjugates. The present sequence represents a bombesin analogue
CC   peptide
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 166
AAB73429
ID   AAB73429 standard; peptide; 11 AA.
XX
AC   AAB73429;
XX
DT   25-JUN-2001  (first entry)
XX
DE   Bombesin analogue peptide, SEQ ID NO:3.
XX
KW   Bombesin analogue; bioconjugate; bis-indocyanine dye; hydrophilic;
```

```
KW   optical diagnostic imaging; tumour detection; cancer; endoscopy;
KW   coronary angiography; atherosclerotic plaque; blood clot.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US6190641-B1.
XX
PD   20-FEB-2001.
XX
PF   18-JAN-2000; 2000US-00484323.
XX
PR   18-JAN-2000; 2000US-00484323.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-280460/29.
XX
PT   Novel indocyanine dyes that absorb and emit light in near infrared region
PT   of electromagnetic spectrum, useful for imaging, diagnosis and therapy of
PT   various diseased states.
XX
PS   Example 9; Col 14; 15pp; English.
XX
CC   The invention relates to compositions comprising a hydrophilic bis-
CC   indocyanine dye with a heterocyclic group in the polymethine chain, and a
CC   pharmaceutically acceptable carrier or excipient. The invention also
CC   relates to diagnostic and therapeutic methods that involve administering
CC   the bis-indocyanine dye compositions to a human; and a method for making
CC   compositions of the invention by conjugating dyes to peptides or
CC   biomolecules by solid phase synthesis. The bis-indocyanine dye
CC   compositions are useful for optical tomographic imaging of organs;
CC   monitoring organ function; coronary angiography; fluorescent endoscopy;
CC   detection, imaging and therapy (photodynamic or localised) of tumours;
CC   laser-guided surgery (particularly for detecting micrometastases during
CC   laparoscopy); and photoacoustic and sonofluorescent methods. A particular
CC   application is diagnosis of atherosclerotic plaques and blood clots.
CC   Also, measuring the pattern of blood clearance of a composition of the
CC   invention can be used for diagnosis of tumours and other diseases. The
CC   bis-indocyanine dyes are designed not to aggregate in solution (by
CC   preventing intra- and inter-molecular hydrophobic interactions); to have
CC   many attachment sites near to the chromophore for formation of a
CC   dendrimer; to allow easy conjugation to biomolecules; and to have a rigid
CC   and extended chromophore backbone that enhances the fluorescent quantum
CC   yield and extends the absorbance maximum to beyond 800 nm. Sequences
CC   AAB73427-AAB73432 represent synthetic peptides used in an exemplification
CC   to illustrate the use of bis-indocyanine dyes of the invention to prepare
CC   bioconjugates. The present sequence represents a bombesin analogue
CC   peptide
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 167
AAG65285
ID   AAG65285 standard; peptide; 11 AA.
XX
AC   AAG65285;
XX
DT   30-NOV-2001  (first entry)
XX
DE   Bombesin analogue peptide sequence 2.
XX
KW   Fluorescence; biocompatible; indocyanine; dye; therapy; endoscopic;
KW   optical diagnostic imaging; tumour; photoacoustic tumor imaging;
KW   sonofluorescence; octreotide; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US6264919-B1.
XX
PD   24-JUL-2001.
XX
PF   10-AUG-2000; 2000US-00636170.
XX
PR   18-JAN-2000; 2000US-00484323.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-556569/62.
XX
PT   In vivo or in vitro fluorescence is restored by adding biocompatible
PT   organic solvents to new indocyanine dye compositions.
XX
PS   Example 9; Col 13; 14pp; English.
XX
CC   The invention relates to restoration of in vivo or in vitro fluorescence
CC   that involves adding biocompatible organic solvents to compositions of
CC   indocyanine dyes. The dyes are of specified formula indicated in the
CC   specification. The method is useful for imaging, diagnosis and therapy of
CC   various disease (particularly for optical diagnostic imaging and therapy,
CC   in endoscopic applications for the detection of tumors and other
CC   abnormalities, for localized therapy, photoacoustic tumor imaging,
CC   detection and therapy, and sonofluorescence tumor imaging, detection and
CC   therapy). The dyes prevent aggregation in solution, are predisposed to
CC   form dendrimers, absorb or emit beyond 800 nm, possess desirable
CC   photophysical properties, and show tissue-specific targeting
CC   capabilities. The present sequence represents an analogue of bombesin
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 168
AAG65284
ID   AAG65284 standard; peptide; 11 AA.
XX
AC   AAG65284;
XX
DT   30-NOV-2001  (first entry)
XX
DE   Bombesin analogue peptide sequence 1.
XX
KW   Fluorescence; biocompatible; indocyanine; dye; therapy; endoscopic;
KW   optical diagnostic imaging; tumour; photoacoustic tumor imaging;
KW   sonofluorescence; octreotide; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
```

```
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US6264919-B1.
XX
PD   24-JUL-2001.
XX
PF   10-AUG-2000; 2000US-00636170.
XX
PR   18-JAN-2000; 2000US-00484323.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu S,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2001-556569/62.
XX
PT   In vivo or in vitro fluorescence is restored by adding biocompatible
PT   organic solvents to new indocyanine dye compositions.
XX
PS   Example 9; Col 13; 14pp; English.
XX
CC   The invention relates to restoration of in vivo or in vitro fluorescence
CC   that involves adding biocompatible organic solvents to compositions of
CC   indocyanine dyes. The dyes are of specified formula indicated in the
CC   specification. The method is useful for imaging, diagnosis and therapy of
CC   various disease (particularly for optical diagnostic imaging and therapy,
CC   in endoscopic applications for the detection of tumors and other
CC   abnormalities, for localized therapy, photoacoustic tumor imaging,
CC   detection and therapy, and sonofluorescence tumor imaging, detection and
CC   therapy). The dyes prevent aggregation in solution, are predisposed to
CC   form dendrimers, absorb or emit beyond 800 nm, possess desirable
CC   photophysical properties, and show tissue-specific targeting
CC   capabilities. The present sequence represents an analogue of bombesin
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 169
AAU97454
ID   AAU97454 standard; peptide; 11 AA.
XX
AC   AAU97454;
XX
DT   13-AUG-2002  (first entry)
XX
DE   Synthetic bombesin analogue peptide #1.
XX
KW   Cyanine dye bioconjugate; optical tomography; fluorescence endoscopy;
KW   atherosclerotic plaque; blood clot; laser assisted guided surgery;
KW   micrometastase; starburst dendrimer; tissue-specific; light emission;
KW   peptide-dye conjugate; light absorption; near infrared region; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US2002044909-A1.
XX
PD   18-APR-2002.
XX
PF   23-MAY-2001; 2001US-00863971.
XX
PR   18-JAN-2000; 2000US-00484320.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2002-434588/46.
XX
PT   New cyanine dye bioconjugates, useful in performing diagnostic and
PT   therapeutic procedures including optical tomography and fluorescence
PT   endoscopy.
XX
PS   Example 9; Page 8; 31pp; English.
XX
CC   The present invention relates to new cyanine dye bioconjugates. The
CC   bioconjugates of the invention are useful in performing diagnostic and
CC   therapeutic procedures including optical tomography and fluorescence
CC   endoscopy. The method is capable of diagnosing atherosclerotic plaques
CC   and blood clots and is useful in laser assisted guided surgery for the
CC   detection of micrometastases. The molecules of the invention preserve the
CC   fluorescence efficiency of the dye molecules, do not aggregate in
CC   solution, form starburst dendrimers, are capable of absorbing or emitting
CC   light in the near infrared region and can be rendered tissue-specific.
CC   The present amino acid sequence represents synthetic bombesin analogue
CC   peptide #1 that was used in the methods of the invention for synthesis of
CC   peptide-dye conjugates
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 170
AAU97455
ID   AAU97455 standard; peptide; 11 AA.
XX
AC   AAU97455;
XX
DT   13-AUG-2002  (first entry)
XX
DE   Synthetic bombesin analogue peptide #2.
XX
KW   Cyanine dye bioconjugate; optical tomography; fluorescence endoscopy;
KW   atherosclerotic plaque; blood clot; laser assisted guided surgery;
KW   micrometastase; starburst dendrimer; tissue-specific; light emission;
KW   peptide-dye conjugate; light absorption; near infrared region; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   US2002044909-A1.
XX
PD   18-APR-2002.
XX
PF   23-MAY-2001; 2001US-00863971.
XX
PR   18-JAN-2000; 2000US-00484320.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2002-434588/46.
XX
```

```
PT   New cyanine dye bioconjugates, useful in performing diagnostic and
PT   therapeutic procedures including optical tomography and fluorescence
PT   endoscopy.
XX
PS   Example 9; Page 8; 31pp; English.
XX
CC   The present invention relates to new cyanine dye bioconjugates. The
CC   bioconjugates of the invention are useful in performing diagnostic and
CC   therapeutic procedures including optical tomography and fluorescence
CC   endoscopy. The method is capable of diagnosing atherosclerotic plaques
CC   and blood clots and is useful in laser assisted guided surgery for the
CC   detection of micrometastases. The molecules of the invention preserve the
CC   fluorescence efficiency of the dye molecules, do not aggregate in
CC   solution, form starburst dendrimers, are capable of absorbing or emitting
CC   light in the near infrared region and can be rendered tissue-specific.
CC   The present amino acid sequence represents synthetic bombesin analogue
CC   peptide #2 that was used in the methods of the invention for synthesis of
CC   peptide-dye conjugates
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 171
ABU09468
ID   ABU09468 standard; peptide; 11 AA.
XX
AC   ABU09468;
XX
DT   26-JUN-2003  (first entry)
XX
DE   Bombesin analogue #2 peptide used for cyanine dye bioconjugation.
XX
KW   Bioconjugate; cyanine dye; atherosclerotic plaque; bombesin; tumour;
KW   blood clot; laser assisted guided surgery; endoscopy;
KW   micrometastasis detection; somatostatin subtype 2 positive tumour;
KW   optical tomography; photoacoustic application; starburst dendrimer;
KW   sonofluorescent application; tissue-specific.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 11
FT                   /note= "C-terminal amide"
XX
PN   US2002156117-A1.
XX
PD   24-OCT-2002.
XX
PF   23-MAY-2001; 2001US-00864011.
XX
PR   18-JAN-2000; 2000US-00484322.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2003-379807/36.
XX
PT   New cyanine dye bioconjugates useful for e.g. the diagnosis and therapy
PT   of tumors in association with e.g. optical tomographic, endoscopic,
PT   photoacoustic and sonofluorescent applications.
XX
PS   Example 9; Page 9; 29pp; English.
XX
CC   The invention relates to cyanine dye bioconjugates. Cyanine dye
CC   bioconjugates are used for performing a diagnostic or therapeutic
CC   procedure i.e. diagnosing atherosclerotic plaques and blood clots and for
CC   laser assisted guided surgery for the detection of micrometastases e.g.
CC   somatostatin subtype 2 positive tumours. Also used for optical
CC   tomographic, endoscopic, photoacoustic and sonofluorescent applications
CC   for the detection and treatment of tumours and other abnormalities. The
CC   composition comprising cyanine dye bioconjugates preserves the
CC   fluorescence efficiency of the dye molecules, does not aggregate in
CC   solution, forms starburst dendrimers and is capable of absorbing or
CC   omitting light in the neat infrared region (beyond 800 nm) and can be
CC   rendered tissue-specific. Conjugation of biomolecules to the cyanine dyes
CC   is readily achievable. The present sequence represents the amino acid
CC   sequence of the bombesin analogue #2 peptide used for cyanine dye
CC   bioconjugation
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 172
ABU09467
ID   ABU09467 standard; peptide; 11 AA.
XX
AC   ABU09467;
XX
DT   26-JUN-2003  (first entry)
XX
DE   Bombesin analogue #1 peptide used for cyanine dye bioconjugation.
XX
KW   Bioconjugate; cyanine dye; atherosclerotic plaque; bombesin; tumour;
KW   blood clot; laser assisted guided surgery; endoscopy;
KW   micrometastasis detection; somatostatin subtype 2 positive tumour;
KW   optical tomography; photoacoustic application; starburst dendrimer;
KW   sonofluorescent application; tissue-specific.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 11
FT                   /note= "C-terminal amide"
XX
PN   US2002156117-A1.
XX
PD   24-OCT-2002.
XX
PF   23-MAY-2001; 2001US-00864011.
XX
PR   18-JAN-2000; 2000US-00484322.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB,  Bugaj JE;
XX
DR   WPI; 2003-379807/36.
XX
PT   New cyanine dye bioconjugates useful for e.g. the diagnosis and therapy
PT   of tumors in association with e.g. optical tomographic, endoscopic,
PT   photoacoustic and sonofluorescent applications.
XX
PS   Example 9; Page 9; 29pp; English.
XX
CC   The invention relates to cyanine dye bioconjugates. Cyanine dye
CC   bioconjugates are used for performing a diagnostic or therapeutic
CC   procedure i.e. diagnosing atherosclerotic plaques and blood clots and for
CC   laser assisted guided surgery for the detection of micrometastases e.g.
CC   somatostatin subtype 2 positive tumours. Also used for optical
```

```
CC   tomographic, endoscopic, photoacoustic and sonofluorescent applications
CC   for the detection and treatment of tumours and other abnormalities. The
CC   composition comprising cyanine dye bioconjugates preserves the
CC   fluorescence efficiency of the dye molecules, does not aggregate in
CC   solution, forms starburst dendrimers and is capable of absorbing or
CC   omitting light in the neat infrared region (beyond 800 nm) and can be
CC   rendered tissue-specific. Conjugation of biomolecules to the cyanine dyes
CC   is readily achievable. The present sequence represents the amino acid
CC   sequence of the bombesin analogue #1 peptide used for cyanine dye
CC   bioconjugation
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 173
ABR42465
ID   ABR42465 standard; peptide; 11 AA.
XX
AC   ABR42465;
XX
DT   11-AUG-2003  (first entry)
XX
DE   Bombesin analogue, used in carbocyanine dye bioconjugate.
XX
KW   Bombesin; carbocyanine dye; cancer; photodiagnosis; phototherapy;
KW   photodynamic therapy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003032900-A2.
XX
PD   24-APR-2003.
XX
PF   07-OCT-2002; 2002WO-US031983.
XX
PR   17-OCT-2001; 2001US-00981206.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Bugaj JE,  Dorshow RB;
XX
DR   WPI; 2003-449176/42.
XX
PT   New carbocyanine dye bioconjugates useful for diagnosis and therapy, e.g.
PT   of tumors, micrometastases or atherosclerosis.
XX
PS   Example 3; Page 19; 52pp; English.
XX
CC   The present sequence is that of an analogue of bombesin, a peptide that
CC   targets overexpressed receptors in neuroendocrine tumours. The analogue
CC   can be used in novel conjugates of the invention. These conjugates
CC   consist of a carbocyanine dye for visualization, a photosensitizer for
CC   photodynamic treatment, and a tumour receptor-avid peptide for site-
CC   specific delivery of the probe and phototoxic agent to diseased tissues.
CC   They are useful for performing diagnostic or therapeutic procedures,
CC   especially optical tomography, fluorescence endoscopy, procedures
CC   involving imaging and therapy using absorption, light scattering,
CC   photoacoustic and sonofluorescence techniques, diagnosis and treatment of
CC   atherosclerotic plaques and blood clots, administering localised therapy,
CC   photodynamic therapy and laser assisted guided surgery for detection and
CC   treatment of micrometastases
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 174
ABR42464
ID   ABR42464 standard; peptide; 11 AA.
XX
AC   ABR42464;
XX
DT   11-AUG-2003  (first entry)
XX
DE   Bombesin analogue, used in carbocyanine dye bioconjugate.
XX
KW   Bombesin; carbocyanine dye; cancer; photodiagnosis; phototherapy;
KW   photodynamic therapy.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003032900-A2.
XX
PD   24-APR-2003.
XX
PF   07-OCT-2002; 2002WO-US031983.
XX
PR   17-OCT-2001; 2001US-00981206.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Bugaj JE,  Dorshow RB;
XX
DR   WPI; 2003-449176/42.
XX
PT   New carbocyanine dye bioconjugates useful for diagnosis and therapy, e.g.
PT   of tumors, micrometastases or atherosclerosis.
XX
PS   Example 3; Page 19; 52pp; English.
XX
CC   The present sequence is that of an analogue of bombesin, a peptide that
CC   targets overexpressed receptors in neuroendocrine tumours. The analogue
CC   can be used in novel conjugates of the invention. These conjugates
CC   consist of a carbocyanine dye for visualization, a photosensitizer for
CC   photodynamic treatment, and a tumour receptor-avid peptide for site-
CC   specific delivery of the probe and phototoxic agent to diseased tissues.
CC   They are useful for performing diagnostic or therapeutic procedures,
CC   especially optical tomography, fluorescence endoscopy, procedures
CC   involving imaging and therapy using absorption, light scattering,
CC   photoacoustic and sonofluorescence techniques, diagnosis and treatment of
CC   atherosclerotic plaques and blood clots, administering localised therapy,
CC   photodynamic therapy and laser assisted guided surgery for detection and
CC   treatment of micrometastases
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10
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RESULT 175
ABR55703
ID   ABR55703 standard; peptide; 11 AA.
XX
AC   ABR55703;
XX
DT   02-SEP-2003  (first entry)
XX
DE   Bombesin analogue peptide #1.
XX
KW   Indocyanine dye; bioconjugate; cytostatic; antiarteriosclerotic;
KW   anticoaggulant; vasotropic; photodynamic therapy; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003032901-A2.
XX
PD   24-APR-2003.
XX
PF   07-OCT-2002; 2002WO-US032021.
XX
PR   17-OCT-2001; 2001US-00978725.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Bugaj JE,  Dorshow RB;
XX
DR   WPI; 2003-430294/40.
XX
PT   New indocyanine dye bioconjugates, useful in diagnostic and therapeutic
PT   procedures, especially as targeted photodynamic therapeutic agent
PT   containing visualizing, targeting and photosensitizing moieties.
XX
PS   Example 3; Page 19; 51pp; English.
XX
CC   The invention relates to indocyanine (or analogue) dye bioconjugates (I)
CC   of specified formula. (I) are used in diagnostic or therapeutic
CC   procedures, specifically procedures using light of wavelength 300-1300
CC   nm, especially: optical tomography diagnostic procedures; fluorescence
CC   endoscopy diagnostic procedures; procedures also involving imaging and
CC   therapy by absorption, light scattering, sonofluorescence or
CC   photoacoustic techniques; procedures for diagnosing and treating
CC   atherosclerotic plaques and blood clots; procedures involving
CC   administering local therapy; photodynamic therapy procedures; or laser
CC   assisted guided surgery procedures for detection and treatment of
CC   micrometastases. (I) are especially targeted optical agents including a
CC   carbocyanine dye for visualization, photosensitizer for photodynamic
CC   treatment and tumour receptor-avid peptide for site-specific delivery of
CC   the probe and phototoxic agent to tumour tissues. The present sequence
CC   represents a bombesin peptide analogue, a bioactive peptide used in the
CC   bioconjugates of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 176
ABR55704
ID   ABR55704 standard; peptide; 11 AA.
XX
AC   ABR55704;
XX
DT   02-SEP-2003  (first entry)
XX
DE   Bombesin analogue peptide #2.
XX
KW   Indocyanine dye; bioconjugate; cytostatic; antiarteriosclerotic;
KW   anticoaggulant; vasotropic; photodynamic therapy; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003032901-A2.
XX
PD   24-APR-2003.
XX
PF   07-OCT-2002; 2002WO-US032021.
XX
PR   17-OCT-2001; 2001US-00978725.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Bugaj JE,  Dorshow RB;
XX
DR   WPI; 2003-430294/40.
XX
PT   New indocyanine dye bioconjugates, useful in diagnostic and therapeutic
PT   procedures, especially as targeted photodynamic therapeutic agent
PT   containing visualizing, targeting and photosensitizing moieties.
XX
PS   Example 3; Page 19; 51pp; English.
XX
CC   The invention relates to indocyanine (or analogue) dye bioconjugates (I)
CC   of specified formula. (I) are used in diagnostic or therapeutic
CC   procedures, specifically procedures using light of wavelength 300-1300
CC   nm, especially: optical tomography diagnostic procedures; fluorescence
CC   endoscopy diagnostic procedures; procedures also involving imaging and
CC   therapy by absorption, light scattering, sonofluorescence or
CC   photoacoustic techniques; procedures for diagnosing and treating
CC   atherosclerotic plaques and blood clots; procedures involving
CC   administering local therapy; photodynamic therapy procedures; or laser
CC   assisted guided surgery procedures for detection and treatment of
CC   micrometastases. (I) are especially targeted optical agents including a
CC   carbocyanine dye for visualization, photosensitizer for photodynamic
CC   treatment and tumour receptor-avid peptide for site-specific delivery of
CC   the probe and phototoxic agent to tumour tissues. The present sequence
CC   represents a bombesin peptide analogue, a bioactive peptide used in the
CC   bioconjugates of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 177
ABR44098
ID   ABR44098 standard; peptide; 11 AA.
XX
AC   ABR44098;
XX
DT   04-AUG-2003  (first entry)
XX
DE   Amino acid sequence of a bombesin analogue peptide #1.
XX
```

```
KW   Cyanine dye; bioconjugate; cytostatic; antiarteriosclerotic;
KW   anticoagulant; photodynamic therapy; micrometastasis; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003032902-A2.
XX
PD   24-APR-2003.
XX
PF   07-OCT-2002; 2002WO-US032022.
XX
PR   17-OCT-2001; 2001US-00981271.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Bugaj JE,  Dorshow RB;
XX
DR   WPI; 2003-457249/43.
XX
PT   New cyanine dye bioconjugates useful for diagnosis and therapy, e.g. of
PT   tumors, micrometastases or atherosclerosis.
XX
PS   Example 3; Page 19; 51pp; English.
XX
CC   The invention relates to new cyanine dye bioconjugates of specified
CC   formula. The cyanine dye bioconjugates are useful for performing
CC   diagnostic or therapeutic procedures, especially optical tomography,
CC   fluorescence endoscopy, procedures involving imaging and therapy using
CC   absorption, light scattering, photoacoustic and sonofluorescence
CC   techniques, diagnosis and treatment of atherosclerotic plaques and blood
CC   clots, administering localized therapy, photodynamic therapy and laser
CC   assisted guided surgery for detection and treatment of micrometastases.
CC   The present sequence represents a bombesin analogue peptide used in the
CC   preparation of the bioconjugates of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 178
ABR44099
ID   ABR44099 standard; peptide; 11 AA.
XX
AC   ABR44099;
XX
DT   04-AUG-2003  (first entry)
XX
DE   Amino acid sequence of a bombesin analogue peptide #2.
XX
KW   Cyanine dye; bioconjugate; cytostatic; antiarteriosclerotic;
KW   anticoagulant; photodynamic therapy; micrometastasis; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003032902-A2.
XX
PD   24-APR-2003.
XX
PF   07-OCT-2002; 2002WO-US032022.
XX
PR   17-OCT-2001; 2001US-00981271.
XX
PA   (MLCW ) MALLINCKRODT INC.
XX
PI   Achilefu SI,  Rajagopalan R,  Bugaj JE,  Dorshow RB;
XX
DR   WPI; 2003-457249/43.
XX
PT   New cyanine dye bioconjugates useful for diagnosis and therapy, e.g. of
PT   tumors, micrometastases or atherosclerosis.
XX
PS   Example 3; Page 19; 51pp; English.
XX
CC   The invention relates to new cyanine dye bioconjugates of specified
CC   formula. The cyanine dye bioconjugates are useful for performing
CC   diagnostic or therapeutic procedures, especially optical tomography,
CC   fluorescence endoscopy, procedures involving imaging and therapy using
CC   absorption, light scattering, photoacoustic and sonofluorescence
CC   techniques, diagnosis and treatment of atherosclerotic plaques and blood
CC   clots, administering localized therapy, photodynamic therapy and laser
CC   assisted guided surgery for detection and treatment of micrometastases.
CC   The present sequence represents a bombesin analogue peptide used in the
CC   preparation of the bioconjugates of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 179
ABR82872
ID   ABR82872 standard; peptide; 11 AA.
XX
AC   ABR82872;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Amino acid sequence of a bombesin peptide analogue 2.
XX
KW   Carbocyanine dye; bioconjugate; photosensitive; antiarteriosclerotic;
KW   cytostatic; tumour detection; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003065888-A1.
XX
PD   14-AUG-2003.
XX
PF   31-JAN-2003; 2003WO-US002901.
XX
PR   07-FEB-2002; 2002US-00071779.
XX
PA   (MLCW ) MALLINCKRODT INC.
PA   (BUGA/) BUGAJ J E.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB;
XX
DR   WPI; 2003-767181/72.
XX
PT   New carbocyanine dye bioconjugate for use in diagnosis and therapy, e.g.
PT   in detecting, imaging, and treating of tumors, tomographic imaging or
```

```
PT   organs, monitoring of organ functions, or performing coronary
PT   angiography.
XX
PS   Example 3; Page 19; 0pp; English.
XX
CC   The invention provides new carbocyanine dye bioconjugate of specified
CC   formula. The inventive carbocyanine dye bioconjugate has optimal tumour-
CC   targeting ability to provide a highly efficient photosensitive agent. The
CC   bioconjugates are useful in diagnosis and therapy, in e.g. detecting,
CC   imaging, and treating of tumours, tomographic imaging or organs,
CC   monitoring of organ functions, performing coronary angiography,
CC   fluorescence endoscopy, laser guided surgery, or performing photoacoustic
CC   and sonofluorescent methods. Sequences ABR82869-876 represent peptides
CC   synthesised for use in peptide-dye conjugates of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 180
ABR82871
ID   ABR82871 standard; peptide; 11 AA.
XX
AC   ABR82871;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Amino acid sequence of a bombesin peptide analogue 1.
XX
KW   Carbocyanine dye; bioconjugate; photosensitive; antiarteriosclerotic;
KW   cytostatic; tumour detection; bombesin.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "C-terminal amide"
XX
PN   WO2003065888-A1.
XX
PD   14-AUG-2003.
XX
PF   31-JAN-2003; 2003WO-US002901.
XX
PR   07-FEB-2002; 2002US-00071779.
XX
PA   (MLCW ) MALLINCKRODT INC.
PA   (BUGA/) BUGAJ J E.
XX
PI   Achilefu SI,  Rajagopalan R,  Dorshow RB;
XX
DR   WPI; 2003-767181/72.
XX
PT   New carbocyanine dye bioconjugate for use in diagnosis and therapy, e.g.
PT   in detecting, imaging, and treating of tumors, tomographic imaging or
PT   organs, monitoring of organ functions, or performing coronary
PT   angiography.
XX
PS   Example 3; Page 19; 0pp; English.
XX
CC   The invention provides new carbocyanine dye bioconjugate of specified
CC   formula. The inventive carbocyanine dye bioconjugate has optimal tumour-
CC   targeting ability to provide a highly efficient photosensitive agent. The
CC   bioconjugates are useful in diagnosis and therapy, in e.g. detecting,
CC   imaging, and treating of tumours, tomographic imaging or organs,
CC   monitoring of organ functions, performing coronary angiography,
CC   fluorescence endoscopy, laser guided surgery, or performing photoacoustic
CC   and sonofluorescent methods. Sequences ABR82869-876 represent peptides
CC   synthesised for use in peptide-dye conjugates of the invention
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 GQWAVGHL 10


RESULT 181
ADD70000
ID   ADD70000 standard; peptide; 11 AA.
XX
AC   ADD70000;
XX
DT   15-JAN-2004  (first entry)
XX
DE   Therapeutic peptide Bombesin.
XX
KW   gastrointestinal disorder; diabetes; malignant proliferation;
KW   benign proliferation; bombesin; gastrin-releasing peptide; GRP;
KW   growth hormone releasing factor; GRF; litorin; neuromedin C; cancer;
KW   small cell lung carcinoma; motility disorder;
KW   exocrine pancreatic carcinoma; cachexia; autocrine mitotic agent;
KW   paracrine mitotic agent; atherosclerosis; diabetic retinopathy.
XX
OS   Amphibia.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   11
FT                   /note= "Amidated"
XX
PN   US2003050436-A1.
XX
PD   13-MAR-2003.
XX
PF   23-OCT-2001; 2001US-00004530.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
PR   02-MAR-1999;   99US-00260846.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Coy DH,  Moreau J,  Kim SH;
XX
DR   WPI; 2003-810756/76.
XX
PT   New therapeutic peptide used for treating e.g. gastrointestinal
PT   disorders, atherosclerosis, cancer, diabetes related retinopathy and
PT   diabetes.
XX
PS   Disclosure; Page 1; 23pp; English.
XX
CC   The invention relates to a new therapeutic peptide comprises 7-10 amino
CC   acid residues. The peptide is an analogue of naturally occurring peptides
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CC   terminating at the carboxy-terminus with a Met residue (e.g. bombesin,
CC   gastrin-releasing peptide (GRP, vasoactive intestinal peptide, VIP),
CC   growth hormone releasing factor (GRF), litorin and neuromedin C) of
CC   formula detailed in the specification. The peptides are used for treating
CC   cancer e.g. small cell lung carcinoma, motility disorders of the
CC   gastrointestinal tract and symptomatic relief and/or treatment of
CC   exocrine pancreatic carcinoma and for restoration of appetite in cachexia
CC   patients, as autocrine or paracrine mitotic agent, and for treating
CC   benign and malignant proliferation of tissue, gastrointestinal disorders,
CC   atherosclerosis and diabetes and diabetic retinopathy. The present
CC   sequence is one of the naturally occurring peptides upon which the
CC   peptides of the invention are based.
XX
SQ   Sequence 11 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 11;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          3 NQWAVGHL 10


RESULT 182
AAY92995
ID   AAY92995 standard; peptide; 12 AA.
XX
AC   AAY92995;
XX
DT   08-NOV-2000  (first entry)
XX
DE   Transforming growth factor inhibitory peptide P41.
XX
KW   Hepatotropic; antagonist; transforming growth factor beta1; TGF-b1;
KW   competitive inhibition; collagen synthesis stimulation inhibitor; liver;
KW   extracellular matrix degradation inhibitor; mimetope; cirrhosis.
XX
OS   Rattus sp.
XX
PN   WO200031135-A1.
XX
PD   02-JUN-2000.
XX
PF   23-NOV-1999;   99WO-ES000375.
XX
PR   24-NOV-1998;   98ES-00002465.
XX
PA   (CIEN-) INST CIENTIFICO & TECNOLOGICO NAVARRA.
XX
PI   Ezquerro Saenz IJ,  Lasarte Sagastibelza JJ,  Prieto Valtuena J;
PI   Borras Cuesta F;
XX
DR   WPI; 2000-411935/35.
XX
PT   Peptides that antagonize binding of transforming growth factor beta1,
PT   useful for treatment of liver disease, especially cirrhosis, are partial
PT   sequences of the factor or its receptors.
XX
PS   Disclosure; Page 27; 86pp; Spanish.
XX
CC   The invention relates to synthetic peptides that antagonise the binding
CC   of transforming growth (TGF) factor beta1 (TGF-b1) to its receptor in
CC   vivo which have partial amino acid sequences identical, or similar, with
CC   those of TGF-b1 and/or its receptors. Peptides AAY92945-Y93133 represent
CC   examples of the peptides of the invention. The peptides act by
CC   competitive inhibition of the binding of TGF-b1 to its receptors, e.g.
CC   they are inhibitors of stimulation of collagen synthesis in liver cells
CC   and inhibitors of synthesis of proteolytic enzymes able to degrade the
CC   extracellular matrix. The peptides, their mimetopes and/or DNA (or
CC   expression systems) encoding the peptides are used for treatment of liver
CC   disease, specifically cirrhosis
XX
SQ   Sequence 12 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 12;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          2 PQPLVWHL 9


RESULT 183
AAY92996
ID   AAY92996 standard; peptide; 12 AA.
XX
AC   AAY92996;
XX
DT   08-NOV-2000  (first entry)
XX
DE   Transforming growth factor inhibitory peptide P42.
XX
KW   Hepatotropic; antagonist; transforming growth factor beta1; TGF-b1;
KW   competitive inhibition; collagen synthesis stimulation inhibitor; liver;
KW   extracellular matrix degradation inhibitor; mimetope; cirrhosis.
XX
OS   Rattus sp.
XX
PN   WO200031135-A1.
XX
PD   02-JUN-2000.
XX
PF   23-NOV-1999;   99WO-ES000375.
XX
PR   24-NOV-1998;   98ES-00002465.
XX
PA   (CIEN-) INST CIENTIFICO & TECNOLOGICO NAVARRA.
XX
PI   Ezquerro Saenz IJ,  Lasarte Sagastibelza JJ,  Prieto Valtuena J;
PI   Borras Cuesta F;
XX
DR   WPI; 2000-411935/35.
XX
PT   Peptides that antagonize binding of transforming growth factor beta1,
PT   useful for treatment of liver disease, especially cirrhosis, are partial
PT   sequences of the factor or its receptors.
XX
PS   Disclosure; Page 27; 86pp; Spanish.
XX
CC   The invention relates to synthetic peptides that antagonise the binding
CC   of transforming growth (TGF) factor beta1 (TGF-b1) to its receptor in
CC   vivo which have partial amino acid sequences identical, or similar, with
CC   those of TGF-b1 and/or its receptors. Peptides AAY92945-Y93133 represent
CC   examples of the peptides of the invention. The peptides act by
CC   competitive inhibition of the binding of TGF-b1 to its receptors, e.g.
CC   they are inhibitors of stimulation of collagen synthesis in liver cells
CC   and inhibitors of synthesis of proteolytic enzymes able to degrade the
CC   extracellular matrix. The peptides, their mimetopes and/or DNA (or
CC   expression systems) encoding the peptides are used for treatment of liver
CC   disease, specifically cirrhosis
XX
SQ   Sequence 12 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 12;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          1 PQPLVWHL 8


RESULT 184
AAY82107
```

```
ID   AAY82107 standard; peptide; 12 AA.
XX
AC   AAY82107;
XX
DT   02-JUN-2000  (first entry)
XX
DE   Bombesin homologue peptide #2.
XX
KW   Bombesin; technetium-99m label; radioimaging; radiodiagnostic;
KW   mercaptoacetyltriglycine; MAG3; radiolabelling; nuclear medicine;
KW   peptide synthesis.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 4
FT                   /note= "D-form residue"
FT   Modified-site   12
FT                   /note= "amidated"
XX
PN   CA2225326-A1.
XX
PD   19-JUN-1999.
XX
PF   19-DEC-1997;   97CA-02225326.
XX
PR   19-DEC-1997;   97CA-02225326.
XX
PA   (OKAR/) OKARVI S M.
PA   (WISH/) WISHART D.
PA   (VDOM/) VAN DOMESELAAR G.
PA   (SURE/) SURESH M R.
XX
PI   Okarvi SM,  Wishart D,  Van Domeselaar G,  Suresh MR;
XX
DR   WPI; 2000-238088/21.
XX
PT   Preparation of 99mTc-labelled peptides, used in radioimaging, comprises
PT   allowing a mercaptoacetyltriglycine technetium chelate to be attached
PT   directly onto a growing peptide chain.
XX
PS   Disclosure; Page 5; 27pp; English.
XX
CC   The present invention describes the preparation of 99mTc-labelled
CC   peptides comprising a simple solid phase synthetic approach which allows
CC   a mercaptoacetyltriglycine (MAG3) technetium chelate to be attached
CC   directly onto a growing peptide chain using conventional solid phase
CC   peptide chemistry. The method is used for preparing 99mTc-labelled
CC   peptides for use in radioimaging and radiodiagnostics. The process
CC   requires less purification steps than prior art, eliminates the need for
CC   solution-phase conjugation and avoids problems associated with non-
CC   specific chelator conjugation. The peptide-conjugates prepared can be
CC   efficiently labeled with 99mTc (92%), are highly resistant to cysteine
CC   challenge, are very stable to plasma and can bind with desired cellular
CC   targets. The present sequence represents a bombesin homologue peptide
CC   used in the exemplification of the present invention
XX
SQ   Sequence 12 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 12;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          4 FQWAVGHL 11


RESULT 185
AAB91906
ID   AAB91906 standard; peptide; 13 AA.
XX
AC   AAB91906;
XX
DT   22-JUN-2001  (first entry)
XX
DE   Bombesin peptide SEQ ID NO:1082.
XX
KW   Protection; endogenous therapeutic peptide; peptidase; conjugation;
KW   blood component; modification; succinimidyl; maleimido group; amino;
KW   hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200069900-A2.
XX
PD   23-NOV-2000.
XX
PF   17-MAY-2000; 2000WO-US013576.
XX
PR   17-MAY-1999;   99US-0134406P.
PR   10-SEP-1999;   99US-0153406P.
PR   15-OCT-1999;   99US-0159783P.
XX
PA   (CONJ-) CONJUCHEM INC.
XX
PI   Bridon DP,  Ezrin AM,  Milner PG,  Holmes DL,  Thibaudeau K;
XX
DR   WPI; 2001-112059/12.
XX
PT   Modifying and attaching therapeutic peptides to albumin prevents
PT   peptidase degradation, useful for increasing length of in vivo activity.
XX
PS   Disclosure; Page 549; 733pp; English.
XX
CC   The present invention describes a modified therapeutic peptide (I)
CC   comprising a therapeutically active amino acid region (III) and a
CC   reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
CC   a less therapeutically active amino acid region (IV), which covalently
CC   bonds with amino/hydroxyl/thiol groups on blood components to form a
CC   peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC   (I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC   factors and neurotransmitters, to protect them from peptidase activity in
CC   vivo for the treatment of various disorders. Endogenous therapeutic
CC   peptides are not suitable as drug candidates as they require frequent
CC   administration due to rapid degradation by peptidases in the body.
CC   Modifying and attaching therapeutic peptides to albumin prevents or
CC   reduces the action of peptidases to increase length of activity (half
CC   life) and specificity as bonding to large molecules decreases
CC   intracellular uptake and interference with physiological processes.
CC   AAB90829 to AAB92441 represent peptides which can be used in the
CC   exemplification of the present invention
XX
SQ   Sequence 13 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 2e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          5 NQWAVGHL 12


RESULT 186
AAB91913
ID   AAB91913 standard; peptide; 13 AA.
XX
AC   AAB91913;
XX
DT   22-JUN-2001  (first entry)
XX
DE   Bombesin peptide SEQ ID NO:1089.
XX
KW   Protection; endogenous therapeutic peptide; peptidase; conjugation;
```

```
KW   blood component; modification; succinimidyl; maleimido group; amino;
KW   hydroxyl; thiol; hormone; growth factor; neurotransmitter.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200069900-A2.
XX
PD   23-NOV-2000.
XX
PF   17-MAY-2000; 2000WO-US013576.
XX
PR   17-MAY-1999;   99US-0134406P.
PR   10-SEP-1999;   99US-0153406P.
PR   15-OCT-1999;   99US-0159783P.
XX
PA   (CONJ-) CONJUCHEM INC.
XX
PI   Bridon DP,  Ezrin AM,  Milner PG,  Holmes DL,  Thibaudeau K;
XX
DR   WPI; 2001-112059/12.
XX
PT   Modifying and attaching therapeutic peptides to albumin prevents
PT   peptidase degradation, useful for increasing length of in vivo activity.
XX
PS   Disclosure; Page 551; 733pp; English.
XX
CC   The present invention describes a modified therapeutic peptide (I)
CC   comprising a therapeutically active amino acid region (III) and a
CC   reactive group (II) (e.g. succinimidyl and maleimido groups) attached to
CC   a less therapeutically active amino acid region (IV), which covalently
CC   bonds with amino/hydroxyl/thiol groups on blood components to form a
CC   peptidase stabilised therapeutic peptide composed of 3-50 amino acids.
CC   (I) are useful for modifying therapeutic peptides e.g. hormones, growth
CC   factors and neurotransmitters, to protect them from peptidase activity in
CC   vivo for the treatment of various disorders. Endogenous therapeutic
CC   peptides are not suitable as drug candidates as they require frequent
CC   administration due to rapid degradation by peptidases in the body.
CC   Modifying and attaching therapeutic peptides to albumin prevents or
CC   reduces the action of peptidases to increase length of activity (half
CC   life) and specificity as bonding to large molecules decreases
CC   intracellular uptake and interference with physiological processes.
CC   AAB90829 to AAB92441 represent peptides which can be used in the
CC   exemplification of the present invention
XX
SQ   Sequence 13 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 2e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          5 NQWAVGHL 12


RESULT 187
ABG72845
ID   ABG72845 standard; peptide; 13 AA.
XX
AC   ABG72845;
XX
DT   27-FEB-2003  (first entry)
XX
DE   Peptide used in electron capture dissociation of b13 2+ ions.
XX
KW   electron capture dissociation; mass spectrometry; electron density;
KW   polypeptide ion; carbohydrate ion; organic polymer ion; ECD;
KW   shorter ion-electron reaction.
XX
OS   Unidentified.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "p not defined"
XX
PN   WO200278048-A1.
XX
PD   03-OCT-2002.
XX
PF   22-MAR-2002; 2002WO-DK000195.
XX
PR   22-MAR-2001; 2001DK-00000478.
PR   22-MAR-2001; 2001US-0277621P.
PR   16-JAN-2002; 2002DK-00000069.
PR   16-JAN-2002; 2002US-0348368P.
XX
PA   (UYSY-) UNIV SYDDANSK.
XX
PI   Zubarev R;
XX
DR   WPI; 2003-103225/09.
XX
PT   Production of electron capture of positive ions, for use in mass
PT   spectrometry, involves providing electron beam having electron density
PT   and low energy to provide electron capture by trapped ions.
XX
PS   Example 1; Fig 7; 33pp; English.
XX
CC   The invention relates to electron capture of positive ions for use in
CC   mass spectrometry that is produced by providing an electron beam having
CC   electron density of a magnitude so that the potential depression created
CC   by the electrons is larger or equal to the kinetic energy of the motion
CC   radial to the beam of the ions thus trapping the portion of ions. The
CC   invention can be used for producing electron capture of positive ions,
CC   e.g., polypeptide, carbohydrate and organic polymer ions, for use in mass
CC   spectrometry. The inventive method provides the ion-electron reaction to
CC   be shortened and improves efficiency of collection of fragments to make
CC   electron capture dissociation more useful. It provides the electron
CC   capture dissociation technique to be used in other types of mass
CC   spectrometers. The ions confined by the electron beam effectively capture
CC   electrons, thus leading to much shorter analysis time. The present
CC   sequence represents the amino acid sequence of a peptide used in the
CC   electron capture dissociation of b13 2+ ions
XX
SQ   Sequence 13 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 13;
  Best Local Similarity   50.0%;  Pred. No. 2e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 188
AAP80311
ID   AAP80311 standard; peptide; 14 AA.
XX
AC   AAP80311;
XX
DT   25-MAR-2003  (revised)
DT   14-SEP-1990  (first entry)
XX
DE   Sequence of bombesin which binds with polypeptide receptor for bombesin
DE   type polypeptides.
XX
KW   Spantide; neuropeptide; polypeptide receptor; bombesin; cancer diagnosis;
KW   cancer therapy; Swiss 3T3 cells; bombesin type polypeptides.
XX
OS   Swiss 3T3 cells.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /label= OTHER
```

```
FT                   /note= "pGlu"
FT   Misc-difference 14
FT                   /label= OTHER
FT                   /note= "Met-NH2"
XX
PN   WO8807551-A.
XX
PD   06-OCT-1988.
XX
PF   31-MAR-1988;   88WO-GB000255.
XX
PR   31-MAR-1987;   87GB-00007607.
PR   25-NOV-1987;   87GB-00027638.
XX
PA   (IMCR ) IMPERIAL CANCER RES TECHNOLOGY.
XX
PI   Rosengurt E,  Zachary I,  Woll P;
XX
DR   WPI; 1988-292842/41.
XX
PT   New polypeptide receptor for bombesin type polypeptide(s) - is isolated
PT   from surface of Swiss 3T3 cells, and antibodies and antagonists are
PT   useful for treating uncontrolled cell proliferation.
XX
PS   Disclosure; Table 2; 42pp; English.
XX
CC   The patent claims a polypeptide isolated from the surface of Swiss 3T3
CC   cells which binds selectively with polypeptides of the bombesin type and
CC   binds with antagonist A and antagonist D. Antagonist A is a commercially
CC   available structural variant of substance P, known as [D-Arg1, D-Pro2, D-
CC   Trp7,9, Leu11] substance P. It is also known as [D-Pro2] spantide.
CC   Antagonist B is also commercially available structural variant of
CC   substance P, known as [D-Phe5] spantide. Substance P is an 11-mer
CC   neuropeptide, of interest in studies in pain transmission. Ten substance
CC   P antagonists (see AAP80313-80322) were tested for their ability to
CC   inhibit mitogenesis stimulated by GRP (the mammalian homologue of
CC   bombesin in Swiss 3T3 cells). Antagonist D was clearly the most potent
CC   GRP antagonist. Peptides B, C, D, E, F, G, H, J and K were less potent
CC   than either A or D. Spantide (B) had no antagonist activity even at 100
CC   uM. Polypeptide antagonists A and D and novel variants are useful for
CC   diagnosis and therapy, esp. of cancers where uncontrolled cell growth is
CC   associated with disorders of proteins of the bombesin family. (Updated on
CC   25-MAR-2003 to correct PR field.) (Updated on 25-MAR-2003 to correct PA
CC   field.)
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 1;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 189
AAR29587
ID   AAR29587 standard; peptide; 14 AA.
XX
AC   AAR29587;
XX
DT   25-MAR-2003  (revised)
DT   13-APR-1993  (first entry)
XX
DE   [Leu13-psi[CH2NH]-Leu14]-bombesin.
XX
KW   Intracellular signal; inhibition; gastrointestinal tract; litorin;
KW   Gastrin Releasing Peptide; GRP.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /label= OTHER
FT                   /note= "pyroglutamic acid"
FT   Modified-site   13. .14
FT                   /note= "Non-peptide bond between Leu13 and Leu14
FT                   consisting of a methyl amide group"
FT   Modified-site   14
FT                   /note= "amidated"
XX
PN   WO9220707-A1.
XX
PD   26-NOV-1992.
XX
PF   21-APR-1992;   92WO-US003287.
XX
PR   23-MAY-1991;   91US-00704863.
XX
PA   (RICH ) MERRELL DOW PHARM INC.
XX
PI   Edwards JV,  Fanger BO;
XX
DR   WPI; 1992-415707/50.
XX
PT   New bombesin peptide agonists and antagonists - stimulate or inhibit
PT   digestion, increase susceptibility of tumours to chemotherapeutic agents,
PT   ured to.
XX
PS   Example; Page 40; 64pp; English.
XX
CC   This peptide is a specific example of a highly generic formula for
CC   bombesin analogues. The peptide was tested in a competitive binding assay
CC   and a Phosphatidyl Inositol (PI)-turnover assay in mouse pancreas. The
CC   peptide demonstrated no agonist activity but showed 30% inhibition of PI-
CC   turnover (c.f. stimulation produced by 100nM GRP). Peptide agonists and
CC   antagonists covered by the generic formula are potentially useful for
CC   growth therapy and the treatment of digestive disorders, e.g. for
CC   stimulating digestion, stimulating growth of tissue in the lung, pancreas
CC   and intestine, stimulating NK cell activity against tumour cells and
CC   stimulating growth of tumours to increase susceptibility to
CC   chemotherapeutic agents. (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 190
AAR47617
ID   AAR47617 standard; peptide; 14 AA.
XX
AC   AAR47617;
XX
DT   25-MAR-2003  (revised)
DT   26-JUL-1994  (first entry)
XX
DE   Bombesin-like peptide analogue.
XX
KW   Acrosome reaction; fertilisation.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   14
FT                   /note= "amidated"
XX
PN   WO9402018-A1.
XX
```

PD 03-FEB-1994.
XX
PF 27-JUL-1993; 93WO-US007044.
XX
PR 27-JUL-1992; 92US-00919731.
PR 23-MAR-1993; 93US-00039778.
XX
PA (MEDI-) MEDICAL RES FOUND OREGON.
XX
PI Spindel ER, Vijayaraghavan S, Nagalia SR, Li K;
XX
DR WPI; 1994-048427/06.
XX
PT New bombesin-like acrosome-related peptides - used to promote the
PT acrosome reaction to promote fertilisation or to develop antagonists to
PT inhibit fertilisation.
XX
PS Disclosure; Page 53; 68pp; English.
XX
CC The peptide is a bombesin-like peptide which is capable of promoting the
CC acrosome reaction to promote fertilisation. Bombesin antagonists can be
CC used to inhibit fertilisation. See also AAR47609-20. (Updated on 25-MAR-
CC 2003 to correct PN field.)
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 25; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 2.1e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHL 8
:|::|:||
Db 6 NQWAVGHL 13

RESULT 191
AAW64900
ID AAW64900 standard; peptide; 14 AA.
XX
AC AAW64900;
XX
DT 06-JUL-1999 (first entry)
XX
DE Bombesin peptide having chlorambucil on the N-terminal.
XX
KW Bombesin; antagonist; chlorambucil; peptic ulcer; pancreatitis;
KW eating disorder; diabetes; acromegaly; enterocutaneous fistula;
KW psoriasis; growth retardation; gastrointestinal motility disorder;
KW antitumour.
XX
OS Bombina bombina.
XX
FH Key Location/Qualifiers
FT Modified-site 1
FT /note= "pyroglutamic acid residue in which the amino
FT group is acylated by a chlorambucil residue"
FT Modified-site 14
FT /note= "Met-NH2"
XX
PN WO9500542-A1.
XX
PD 05-JAN-1995.
XX
PF 15-JUN-1994; 94WO-US006757.
XX
PR 18-JUN-1993; 93US-00078062.
PR 17-DEC-1993; 93US-00168390.
XX
PA (PEPT-) PEPTIDE TECHNOLOGIES CORP.
XX
PI Knight M, Takahashi K, Chandrasekhar B;
XX
DR WPI; 1995-052004/07.
XX
PT New bombesin, gastrin releasing peptide or Neuromedin B or C derivs. -
PT antagonists for treating conditions such as gastrointestinal disorders,
PT psoriasis and cancers.
XX
PS Claim 1; Page 30; 45pp; English.
XX
CC The patent discloses (1) the peptide sequence of bombesin (BBN), gastrin
CC releasing peptide (GRP), Neuromedin B or Neuromedin C, the peptide
CC sequence having a chlorambucil group attached to the amino terminal; (2)
CC a BBN receptor antagonist of formula R4-His-Trp-Ala-R1-R2-His-R3-CO-
CC CH2CH3; and (3) a BBN receptor antagonist of formula R4-Asn-R5-Trp-Ala-
CC Val-R2-His-Leu-CO-CH2CH3. In these formulae, R1 = Val or Thr; R2 = Gly or
CC D-Ala; R3 = Leu or Phe; R4 = N-acetyl, bromoacetyl, chloroacetyl, [bis(2-
CC chloroethyl)- amino]-L-phenylalanine or a chlorambucil group; and R5 =
CC Gln or His. The compounds act as potent BBN/GRP-like peptide antagonists.
CC They can be used to inhibit the growth of cells that are sensitive to the
CC growth-promoting effects of BBN, GRP or a related peptide such as
CC pancreatic cells, gastric cells, neurons, hypothalamic cells and
CC cancerous cells or tumours. They can also be used to inhibit the binding
CC of BBN, GRP or a related peptide to cells capable of such binding. They
CC can be used for treating e.g. peptic ulcer, pancreatitis, eating
CC disorders, diabetes, acromegaly, enterocutaneous fistula, psoriasis,
CC growth retardation, gastrointestinal motility disorders or tumours. The
CC terminal structures of the compounds protect them from in vivo
CC proteolysis and provide highly potent antagonist effects that persist for
CC extended periods of time upon administration
XX
SQ Sequence 14 AA;

Query Match 100.0%; Score 25; DB 2; Length 14;
Best Local Similarity 50.0%; Pred. No. 2.1e+02;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHL 8
:|::|:||
Db 6 NQWAVGHL 13

RESULT 192
AAW11504
ID AAW11504 standard; peptide; 14 AA.
XX
AC AAW11504;
XX
DT 24-SEP-1997 (first entry)
XX
DE Bombesin peptide for fusion to humanised anti-Fc gamma RI antibody.
XX
KW Humanised antibody; anti-Fc receptor; H22; bifunctional; bispecific;
KW fusion protein; chimera; cancer; tumour; cytotoxic; bombesin.
XX
OS Synthetic.
XX
PN WO9640789-A1.
XX
PD 19-DEC-1996.
XX
PF 07-JUN-1996; 96WO-US009988.
XX
PR 07-JUN-1995; 95US-00484172.
XX
PA (MEDA-) MEDAREX INC.
XX
PI Deo YM, Goldstein J, Graziano R, Somasundaram C;
XX
DR WPI; 1997-052242/05.
XX
PT Recombinant, multi-specific anti-Fc receptor antibody molecules - also
PT comprise an anti-target portion, used for the treatment of cancer,
PT autoimmune disease and pathogenic infection.
XX
PS Example 4; Page 29; 115pp; English.

```
XX
CC   DNA encoding the heavy chain of humanised anti-Fc gamma RI monoclonal
CC   antibody H22 was fused to a synthetic DNA sequence encoding amino acids 2
CC   -14 of bombesin with an additional glycine residue at the C-terminal of
CC   the peptide (i.e. the present sequence). The resulting fusion protein was
CC   shown to mediate tumour cell killing
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          5 NQWAVGHL 12


RESULT 193
AAW04621
ID   AAW04621 standard; peptide; 14 AA.
XX
AC   AAW04621;
XX
DT   13-AUG-1997  (first entry)
XX
DE   Bombesin peptide for mass spectrometry analysis.
XX
KW   Mass spectrometry; polymer analysis; biopolymer analysis.
XX
OS   Synthetic.
XX
PN   WO9636986-A1.
XX
PD   21-NOV-1996.
XX
PF   17-MAY-1996;   96WO-US007146.
XX
PR   19-MAY-1995;   95US-00446055.
PR   19-MAY-1995;   95US-00447175.
XX
PA   (PERS-) PERSEPTIVE BIOSYSTEMS INC.
XX
PI   Patterson DH,  Tarr GE;
XX
DR   WPI; 1997-012308/01.
XX
PT   Sequencing polymers, e.g. DNA, RNA, peptide nucleic acids, proteins, etc.
PT   - by obtaining mass to charge ratios of polymer fragments, pref. using
PT   mass spectrometer, and performing statistical analysis.
XX
PS   Example 2; Page 32; 86pp; English.
XX
CC   A method of obtaining sequence information about a polymer (e.g. DNA,
CC   RNA, peptide nucleic acids, proteins, peptides and carbohydrates)
CC   comprising monomers of known mass has been claimed. The present sequence
CC   represents a bombesin peptide, and was used as an example as a digestion
CC   before analysis by mass spectrometry, using this novel on-plate strategy.
CC   Total sequence information from a nine well digestion can be represented
CC   in a single digestion or it is often derived from two or more wells. The
CC   methods, apparatus and kit (claimed) can be used for the analysis of
CC   polymers, particularly biopolymers, e.g. DNA, RNA, peptide nucleic acids,
CC   proteins, peptides and carbohydrates. It provides a rapid, automated and
CC   cost effective sequencing of polymers, with a statistical certainty
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 194
AAW50621
ID   AAW50621 standard; peptide; 14 AA.
XX
AC   AAW50621;
XX
DT   14-SEP-1998  (first entry)
XX
DE   Peptide analogue for treating cancer.
XX
KW   Cancer; gastrin releasing peptide; neuromedin B; neuromedin C; bombesin;
KW   litorin; peptide analogue; colon; prostate; breast cancer.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyroglutamic acid"
FT   Modified-site   13. .14
FT                   /note= "Leu-psi(CH2NH)-Leu-NH2"
XX
PN   US5736517-A.
XX
PD   07-APR-1998.
XX
PF   08-JUN-1993;   93US-00073771.
XX
PR   15-SEP-1989;   89US-00408125.
PR   21-NOV-1989;   89US-00440039.
PR   09-MAY-1990;   90US-00520225.
XX
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Bogden AE,  Moreau J;
XX
DR   WPI; 1998-239254/21.
XX
PT   Treatment of cancer in mammals, particularly of the colon, prostate or
PT   breast - comprises the administration of a cell inhibiting peptide.
XX
PS   Claim 5; Col 28; 24pp; English.
XX
CC   The invention relates to a method of treating cancer which involves
CC   administering a cancer cell inhibiting amount of an analogue of a
CC   naturally occurring biologically active peptide or a fragment thereof,
CC   the peptide being one of mammalian gastrin releasing peptide, neuromedin
CC   B, neuromedin C, amphibian bombesin or litorin. The peptides are useful
CC   in the treatment of mammalian, especially human cancers, particularly
CC   colon, prostatic, lung, breast and pancreatic cancer. The analogues can
CC   also be used to treat non-malignant proliferative diseases in humans. The
CC   present sequence represents a specifically claimed peptide analogue
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 195
AAW50965
ID   AAW50965 standard; peptide; 14 AA.
XX
AC   AAW50965;
XX
DT   31-JUL-1998  (first entry)
```

```
XX
DE   Bombesin analogue [Tyr4].
XX
KW   Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
KW   Substance P; cancer; inhibition; growth hormone releasing factor.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyroglutamic acid"
FT   Modified-site   14
FT                   /note= "C-terminal amide"
XX
PN   EP835662-A2.
XX
PD   15-APR-1998.
XX
PF   11-DEC-1996;   96EP-00309012.
XX
PR   08-OCT-1996;   96US-00727679.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
XX
PI   Mukherjee R,  Jaggi M;
XX
DR   WPI; 1998-208959/19.
XX
PT   Composition containing analogues of vasoactive intestinal peptide,
PT   somatostatin - bombesin and substance P, for treatment of tumours and for
PT   inhibiting over-expression of these peptide(s).
XX
PS   Disclosure; Page 12; 49pp; English.
XX
CC   The invention relates to a new composition which comprises: (i) the
CC   somatostatin analogue SOM2 AGCKNFFdWKTPTSdC (3-14 disulphide bridge), and
CC   (ii) at least 4 of the peptides: antagonist of vasoactive intestinal
CC   peptide (VIP1); VIP receptor-binding inhibitor (VIP2); VIP receptor
CC   antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
CC   (BOM1) and substance P antagonist (SP1). Also claimed are more general
CC   compositions containing peptide analogues of somatostatin, VIP, bombesin
CC   and substance P. The compositions are used in human or veterinary
CC   medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
CC   cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
CC   of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
CC   particularly rectum and colon, and (b) to prevent, inhibit or modulate
CC   over-expression of, e.g. VIP. A wide range of cancer cells express
CC   receptors for VIP, somatostatin, bombesin and/or substance P. The present
CC   sequence represents a bombesin analogue
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 196
AAW50959
ID   AAW50959 standard; peptide; 14 AA.
XX
AC   AAW50959;
XX
DT   31-JUL-1998  (first entry)
XX
DE   Bombesin analogue, [Leu13-R-Leu14]-bombesin.
XX
KW   Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
KW   Substance P; cancer; inhibition; growth hormone releasing factor.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyroglutamic acid"
FT   Misc-difference 13. .14
FT                   /note= "Reduced bond"
FT   Modified-site   14
FT                   /note= "C-terminal amide"
XX
PN   EP835662-A2.
XX
PD   15-APR-1998.
XX
PF   11-DEC-1996;   96EP-00309012.
XX
PR   08-OCT-1996;   96US-00727679.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
XX
PI   Mukherjee R,  Jaggi M;
XX
DR   WPI; 1998-208959/19.
XX
PT   Composition containing analogues of vasoactive intestinal peptide,
PT   somatostatin - bombesin and substance P, for treatment of tumours and for
PT   inhibiting over-expression of these peptide(s).
XX
PS   Disclosure; Page 12; 49pp; English.
XX
CC   The invention relates to a new composition which comprises: (i) the
CC   somatostatin analogue SOM2 AGCKNFFdWKTPTSdC (3-14 disulphide bridge), and
CC   (ii) at least 4 of the peptides: antagonist of vasoactive intestinal
CC   peptide (VIP1); VIP receptor-binding inhibitor (VIP2); VIP receptor
CC   antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
CC   (BOM1) and substance P antagonist (SP1). Also claimed are more general
CC   compositions containing peptide analogues of somatostatin, VIP, bombesin
CC   and substance P. The compositions are used in human or veterinary
CC   medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
CC   cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
CC   of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
CC   particularly rectum and colon, and (b) to prevent, inhibit or modulate
CC   over-expression of, e.g. VIP. A wide range of cancer cells express
CC   receptors for VIP, somatostatin, bombesin and/or substance P. The present
CC   sequence represents a bombesin analogue
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 197
AAW50957
ID   AAW50957 standard; peptide; 14 AA.
XX
AC   AAW50957;
XX
DT   31-JUL-1998  (first entry)
XX
DE   Bombesin analogue, [Leu13,psi(CH2NH)Leu14]-bombesin.
XX
KW   Vasoactive intestinal peptide; VIP; antagonist; somatostatin; bombesin;
KW   Substance P; cancer; inhibition; growth hormone releasing factor.
XX
OS   Synthetic.
XX
```

```
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Pyrglutamic acid"
FT   Misc-difference 13. .14
FT                   /note= "a surrogate bond (CH2NH)"
FT   Modified-site   14
FT                   /note= "C-terminal amide"
XX
PN   EP835662-A2.
XX
PD   15-APR-1998.
XX
PF   11-DEC-1996;   96EP-00309012.
XX
PR   08-OCT-1996;   96US-00727679.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
XX
PI   Mukherjee R,  Jaggi M;
XX
DR   WPI; 1998-208959/19.
XX
PT   Composition containing analogues of vasoactive intestinal peptide,
PT   somatostatin - bombesin and substance P, for treatment of tumours and for
PT   inhibiting over-expression of these peptide(s).
XX
PS   Disclosure; Page 12; 49pp; English.
XX
CC   The invention relates to a new composition which comprises: (i) the
CC   somatostatin analogue SOM2 AGCKNFFdWKTPTSdC (3-14 disulphide bridge), and
CC   (ii) at least 4 of the peptides: antagonist of vasoactive intestinal
CC   peptide (VIP1); VIP receptor-binding inhibitor (VIP2); VIP receptor
CC   antagonist (VIP3); somatostatin analogue (SOM1); bombesin antagonist
CC   (BOM1) and substance P antagonist (SP1). Also claimed are more general
CC   compositions containing peptide analogues of somatostatin, VIP, bombesin
CC   and substance P. The compositions are used in human or veterinary
CC   medicine: (a) to kill (or inhibit multiplication of) tumour or cancer
CC   cells, particularly for treatment of leukaemia, lymphoma, adenocarcinoma
CC   of stomach, pancreas or prostate, or cancer of lung, breast, kidney or
CC   particularly rectum and colon, and (b) to prevent, inhibit or modulate
CC   over-expression of, e.g. VIP. A wide range of cancer cells express
CC   receptors for VIP, somatostatin, bombesin and/or substance P. The present
CC   sequence represents a bombesin analogue
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 198
AAW52611
ID   AAW52611 standard; peptide; 14 AA.
XX
AC   AAW52611;
XX
DT   22-JUN-1998  (first entry)
XX
DE   Bombesin linear analogue peptide BIM-26027.
XX
KW   Bombesin; linear; pseudopeptide bond; competitive inhibitor; cancer;
KW   tumour; gastric acid secretion; appetite.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "pyroGlu"
FT   Modified-site   10. .11
FT                   /note= "pseudopeptide linkage -CH2NH-"
FT   Modified-site   14
FT                   /note= "Leu-NH2"
XX
PN   US5723578-A.
XX
PD   03-MAR-1998.
XX
PF   07-JUN-1995;   95US-00488099.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
PR   10-NOV-1994;   94US-00337127.
XX
PA   (BIOM-) BIOMEASURE INC.
PA   (TULA ) TULANE EDUCATIONAL FUND.
XX
PI   Kim SH,  Coy DH,  Moreau J;
XX
DR   WPI; 1998-229235/20.
XX
PT   Bombesin analogues - useful for treating cancer, etc.
XX
PS   Claim 9; Col 16; 11pp; English.
XX
CC   Bombesin is an amphibian peptide (closely related to mammalian gastrin-
CC   releasing peptide) which is an autocrine or paracrine mitotic factor for
CC   several human cancer cell lines. The patent discloses new linear peptide
CC   analogues of bombesin which have modified amino acids in various
CC   positions. More specifically, the peptides have, towards the C-terminal
CC   end, either a pseudopeptide bond or a statine or an AHPPA residue to
CC   interfere with hydrogen bonding and thus hinder the formation of hairpin
CC   configuration upon which bombesin activity depends. The present sequence
CC   is a specifically claimed example of the new analogues. The peptides
CC   compete with bombesin for binding to receptors on target cells, but they
CC   fail to exhibit the activity of the naturally occurring peptide. They are
CC   useful for treating cancer, inhibiting gastric acid secretion and
CC   restoring appetite to cachexic patients. They can also be labelled and
CC   used for tumour imaging
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 199
AAW92732
ID   AAW92732 standard; peptide; 14 AA.
XX
AC   AAW92732;
XX
DT   20-MAR-2003  (revised)
DT   30-APR-1999  (first entry)
XX
DE   Amphibian bombesin peptide.
XX
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KW   Bombesin; gastrin releasing peptide; GRP; GRF; litorin; proliferation;
KW   growth hormone releasing factor; treatment; benign; malignant; tissue;
KW   small-cell lung carcinoma; atherosclerosis; gastrointestinal disorder;
KW   diabetes; diabetes related retinopathy.
XX
OS   Amphibia.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "Residue is pyroglutamate"
FT   Modified-site   14
FT                   /note= "C-terminus amidated"
XX
PN   US5877277-A.
XX
PD   02-MAR-1999.
XX
PF   10-NOV-1994;   94US-00337127.
XX
PR   24-SEP-1987;   87US-00100571.
PR   25-MAR-1988;   88US-00173311.
PR   08-JUN-1988;   88US-00204171.
PR   16-JUN-1988;   88US-00207759.
PR   23-SEP-1988;   88US-00248771.
PR   14-OCT-1988;   88US-00257998.
PR   09-DEC-1988;   88US-00282328.
PR   02-MAR-1989;   89US-00317941.
PR   07-JUL-1989;   89US-00376555.
PR   21-AUG-1989;   89US-00397169.
PR   30-MAR-1990;   90US-00502438.
PR   18-OCT-1991;   91US-00779039.
XX
PA   (TULA ) TULANE EDUCATIONAL FUND.
PA   (BIOM-) BIOMEASURE INC.
XX
PI   Kim SH,  Coy DH,  Moreau J;
XX
DR   WPI; 1999-189718/16.
XX
PT   New peptides - useful for treating benign or malignant tissue
PT   proliferation, gastrointestinal disorders and diabetes.
XX
PS   Disclosure; Col 25-26; 22pp; English.
XX
CC   This invention describes novel peptides which are analogues of litorin or
CC   the 10 amino acid carboxy-terminal region of mammalian gastrin releasing
CC   peptide or the 10 amino acid carboxy-terminal region of amphibian
CC   bombesin of formula (R1)(R2)A1-A2-Trp-A4-A5-A6-A7-W where A1 = D-isomer
CC   of p-X-Phe, Trp or beta-Nal; X = F, Cl, Br, NO2, OH, H or Me; A2 = Gly,
CC   Ala, Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys, beta-Nal, His, 1-
CC   methyl-His or 3-methyl-His; A4 = Ala, Val, Gln, Asn, Gly, Leu, Ile, Nle,
CC   alpha-aminobutyric acid, Met, p-X Phe, Trp, Cys or beta-Nal; A5 = Gln,
CC   Asn, Gly, Ala, Leu, Ile, Nle, alpha-aminobutyric acid, Met, Val, p-X-Phe,
CC   Trp, Thr or beta-Nal; A6 = Sar, Gly or D-isomer of Ala, N-methyl-Ala,
CC   Val, Gln, Asn, Leu, Ile, Met, p-X-Phe, Trp, Cys or beta-Nal; A7 = His or
CC   1-methyl or 3-methyl-His; W = -N(R3)-CH(Z1)-R4- CH(Z2)-C(=O)V; R4 = CH2NH
CC   ; Z1, Z2 = Gly, Ala, Val, Leu, Ile, Ser, Asp, Asn, Glu, Gln, p-X-Phe,
CC   Trp, Cys, Met, Pro, HyPro or cyclohexylAla; V = OR5 or NR6R7; R3, R5, R6,
CC   R7 = H, lower alkyl, phenyl(lower alkyl) or naphthyl(lower alkyl); R1, R2
CC   = H, 112C alkyl, 7-10C phenylalkyl or COE1; where R1 and R2 are bonded to
CC   the N-terminal amino acid of the peptide; E1 = 1-20C alkyl, 3-20C
CC   alkenyl, 3-20C alkynyl, Ph, naphthyl or 7-10C phenylalkyl; provided that
CC   when 1 of R1 and R2 is COE1, the other must be H. The peptides can be
CC   used for treating benign or malignant proliferation of tissue e.g. small-
CC   cell lung carcinoma, atherosclerosis, gastrointestinal disorders, and
CC   diabetes or diabetes related retinopathy. This sequence represents an
CC   amphibian bombesin peptide. (Updated on 20-MAR-2003 to correct PR field.)
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13


RESULT 200
AAY31061
ID   AAY31061 standard; peptide; 14 AA.
XX
AC   AAY31061;
XX
DT   21-OCT-1999  (first entry)
XX
DE   Non-crosslinked protein particle peptide 110.
XX
KW   Non-crosslinked protein particle; diagnostic; therapy; monodisperse;
KW   albumin; haemoglobin; nanometer; micrometer; clearance.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Modified-site   1
FT                   /note= "pyroglutamic acid"
FT   Modified-site   14
FT                   /note= "C-terminal amide"
XX
PN   US5945033-A.
XX
PD   31-AUG-1999.
XX
PF   12-NOV-1996;   96US-00747137.
XX
PR   15-JAN-1991;   91US-00641720.
PR   13-OCT-1992;   92US-00959560.
PR   01-JUN-1993;   93US-00069831.
PR   14-MAR-1994;   94US-00212546.
XX
PA   (HEMO-) HEMOSPHERE INC.
XX
PI   Yen RCK;
XX
DR   WPI; 1999-508153/42.
XX
PT   Non-crosslinked protein particles for therapeutic and diagnostic use.
XX
PS   Example 22; Col 95-96; 65pp; English.
XX
CC   This invention describes a novel aqueous suspension of monodisperse
CC   particles on non-crosslinked, non-denatured albumin (50-5000 nm) which is
CC   stable against dissolving upon dilution with an alcohol-free aqueous
CC   medium. The method involves (a) forming an aqueous solution containing
CC   albumin and hemoglobin and (b) treating the aqueous solution with an
CC   alcohol to cause the solution to become turbid. The particles are useful
CC   as agents for in vivo administration, either of their own administration
CC   or as a vehicle for other therapeutic or diagnostic agents. The method
CC   permits the formation of albumin and hemoglobin particles in the
CC   nanometer and micrometer size range, in a form closer to their natural
CC   form than the forms of the prior art. The particles therefore constitute
CC   a more closely controlled agent for in vivo administration, with greater
CC   ease of clearance from the body after their period of usefulness.
CC   AAY30952-Y31135 represent peptides used in the method of the invention
XX
SQ   Sequence 14 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 14;
  Best Local Similarity   50.0%;  Pred. No. 2.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHL 8
              :|::|:||
Db          6 NQWAVGHL 13
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Search completed: August 23, 2004, 11:10:31
Job time : 96 secs

GenCore version 5.1.6

OM protein - protein search, using sw model

Run on: August 23, 2004, 10:56:47 ; Search time 89 Seconds
(without alignments)
25.398 Million cell updates/sec

Title: VARIANT2
Perfect score: 25
Sequence: 1 XQXXVXHI 8

Scoring table: BLOSUM62DX
Gapop 10.0 , Gapext 0.5

Searched: 1586107 seqs, 282547505 residues

Total number of hits satisfying chosen parameters: 1586107

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 200 summaries

Database : A_Geneseq_29Jan04:*
1: geneseqp1980s:*
2: geneseqp1990s:*
3: geneseqp2000s:*
4: geneseqp2001s:*
5: geneseqp2002s:*
6: geneseqp2003as:*
7: geneseqp2003bs:*
8: geneseqp2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	25	100.0	8	3	AAB08309	Aab08309 Amino aci
2	25	100.0	8	3	AAB08310	Aab08310 Amino aci
3	25	100.0	8	4	AAE10466	Aae10466 Synthetic
4	25	100.0	8	4	AAE10467	Aae10467 Synthetic
5	25	100.0	8	7	ABU08882	Abu08882 Antiangio
6	25	100.0	8	7	ABU08881	Abu08881 Antiangio
7	25	100.0	35	4	AAU17831	Aau17831 Novel hum
8	25	100.0	37	4	AAM86667	Aam86667 Human imm
9	25	100.0	43	4	AAM89543	Aam89543 Human imm
10	25	100.0	44	5	AAO22575	Aao22575 Wooden le
11	25	100.0	47	4	AAM14639	Aam14639 Peptide #
12	25	100.0	47	4	ABB33599	Abb33599 Peptide #
13	25	100.0	47	4	AAM27059	Aam27059 Peptide #
14	25	100.0	47	4	ABB28419	Abb28419 Peptide #
15	25	100.0	47	4	ABB19054	Abb19054 Protein #
16	25	100.0	47	4	AAM66773	Aam66773 Human bon
17	25	100.0	47	4	AAM54372	Aam54372 Human bra
18	25	100.0	47	4	ABG48442	Abg48442 Human liv
19	25	100.0	47	4	AAM02364	Aam02364 Peptide #
20	25	100.0	47	5	ABG36428	Abg36428 Human pep
21	25	100.0	53	3	AAB54011	Aab54011 Human pan
22	25	100.0	55	4	AAU45934	Aau45934 Propionib
23	25	100.0	55	6	ABM42453	Abm42453 Propionib
24	25	100.0	56	4	ABB03789	Abb03789 Human mus
25	25	100.0	56	6	ABU13083	Abu13083 Novel hum
26	25	100.0	60	6	ABP75845	Abp75845 Human sec
27	25	100.0	64	2	AAY11419	Aay11419 Human 5'
28	25	100.0	65	4	AAG74878	Aag74878 Human col
29	25	100.0	65	5	ABP63801	Abp63801 Human ORF
30	25	100.0	81	4	AAG64900	Aag64900 Human kin
31	25	100.0	87	4	AAU27930	Aau27930 Human con
32	25	100.0	87	4	AAU19327	Aau19327 Human G p
33	25	100.0	88	4	AAB92655	Aab92655 Human pro
34	25	100.0	88	6	ABP75406	Abp75406 Human sec
35	25	100.0	91	4	AAM93111	Aam93111 Human dig
36	25	100.0	91	4	AAM38627	Aam38627 Human col
37	25	100.0	91	5	ABG97679	Abg97679 Human col
38	25	100.0	91	7	ADB92935	Adb92935 Human col
39	25	100.0	92	5	ABB55525	Abb55525 Lactococc
40	25	100.0	94	5	ABB99244	Abb99244 Phosphori
41	25	100.0	96	3	AAG34448	Aag34448 Arabidops
42	25	100.0	96	5	ABB53633	Abb53633 Lactococc
43	25	100.0	100	3	AAG02708	Aag02708 Human sec
44	25	100.0	101	6	ABR82047	Abr82047 C. elegan
45	25	100.0	107	4	AAO03068	Aao03068 Human pol
46	25	100.0	113	3	AAG55413	Aag55413 Arabidops
47	25	100.0	117	3	AAG55412	Aag55412 Arabidops
48	25	100.0	117	5	ABB89102	Abb89102 Human pol
49	25	100.0	119	5	ABP05752	Abp05752 Human ORF
50	25	100.0	121	6	ADA33447	Ada33447 Acinetoba
51	25	100.0	126	6	ABU00139	Abu00139 Human nov
52	25	100.0	129	2	AAY08249	Aay08249 Human cad
53	25	100.0	134	4	AAG82581	Aag82581 S. epider
54	25	100.0	136	6	ABP80506	Abp80506 N. gonorr
55	25	100.0	143	3	AAB41164	Aab41164 Human ORF
56	25	100.0	148	6	ABP79474	Abp79474 N. gonorr
57	25	100.0	151	4	ABB68804	Abb68804 Drosophil
58	25	100.0	151	5	ABB08007	Abb08007 Human lip
59	25	100.0	152	4	AAG63223	Aag63223 Amino aci
60	25	100.0	152	6	AAO29517	Aao29517 Human pho
61	25	100.0	157	7	ADC39186	Adc39186 Novel hum
62	25	100.0	158	2	AAR63044	Aar63044 RPLA2-8.
63	25	100.0	158	4	AAG82778	Aag82778 S. epider
64	25	100.0	159	4	ABG06244	Abg06244 Novel hum
65	25	100.0	159	5	ABB99217	Abb99217 Ribosomal
66	25	100.0	161	4	AAU49164	Aau49164 Propionib
67	25	100.0	161	6	ABM45683	Abm45683 Propionib
68	25	100.0	162	6	ABR41393	Abr41393 Human DIT
69	25	100.0	163	4	AAM86157	Aam86157 Human imm
70	25	100.0	164	2	AAW78156	Aaw78156 Human sec
71	25	100.0	169	5	ABP64903	Abp64903 Human pro
72	25	100.0	170	5	AAM47374	Aam47374 Rat phero
73	25	100.0	170	5	AAM47385	Aam47385 Rat phero
74	25	100.0	170	5	AAM47391	Aam47391 Rat phero
75	25	100.0	170	5	AAM47392	Aam47392 Rat phero
76	25	100.0	172	4	ABG07209	Abg07209 Novel hum
77	25	100.0	173	4	ABG18197	Abg18197 Novel hum
78	25	100.0	181	6	ABM69901	Abm69901 Photorhab
79	25	100.0	183	2	AAR68871	Aar68871 Hepatitis
80	25	100.0	191	3	AAG37616	Aag37616 Arabidops
81	25	100.0	191	3	AAG13674	Aag13674 Arabidops
82	25	100.0	193	6	ABP72267	Abp72267 Human cer
83	25	100.0	194	4	AAY72167	Aay72167 Human RNA
84	25	100.0	194	7	ADE59099	Ade59099 Human Pro
85	25	100.0	195	4	ABB52791	Abb52791 Escherich
86	25	100.0	195	5	ABB91436	Abb91436 Herbicida
87	25	100.0	198	4	AAG81948	Aag81948 S. epider
88	25	100.0	200	3	AAB58855	Aab58855 Breast an
89	25	100.0	200	5	ABP41624	Abp41624 Human ova
90	25	100.0	202	7	ADE47730	Ade47730 Human NOV
91	25	100.0	206	6	ABU49778	Abu49778 Protein e
92	25	100.0	207	6	ABM70558	Abm70558 Photorhab
93	25	100.0	209	4	AAM79206	Aam79206 Human pro
94	25	100.0	212	4	AAU37626	Aau37626 Streptoco
95	25	100.0	212	6	ABU00572	Abu00572 S. pneumo
96	25	100.0	212	6	ABP81534	Abp81534 Streptoco
97	25	100.0	212	6	ABU45820	Abu45820 Protein e
98	25	100.0	213	3	AAG53046	Aag53046 Arabidops

99	25	100.0	213	3	AAG07579	Aag07579 Arabidops
100	25	100.0	213	4	ABG20132	Abg20132 Novel hum
101	25	100.0	215	2	AAR98160	Aar98160 NodB prot
102	25	100.0	215	5	ABB48908	Abb48908 Listeria
103	25	100.0	216	2	AAW79088	Aaw79088 Human sec
104	25	100.0	216	5	ABP61789	Abp61789 Human pol
105	25	100.0	216	6	ABU30667	Abu30667 Protein e
106	25	100.0	217	3	AAY84844	Aay84844 Protein e
107	25	100.0	217	5	ABU52145	Abu52145 Helicobac
108	25	100.0	217	6	ABU20649	Abu20649 Protein e
109	25	100.0	218	5	ABG77402	Abg77402 Selected
110	25	100.0	218	5	ABJ11304	Abj11304 Yeast sel
111	25	100.0	219	3	AAG07578	Aag07578 Arabidops
112	25	100.0	219	4	ABB11692	Abb11692 Human pro
113	25	100.0	219	4	AAM80190	Aam80190 Human pro
114	25	100.0	219	4	ABG06039	Abg06039 Novel hum
115	25	100.0	219	6	ADA11866	Ada11866 Human nov
116	25	100.0	220	2	AAY36230	Aay36230 Human sec
117	25	100.0	220	5	ABU51588	Abu51588 Helicobac
118	25	100.0	220	6	ADA11720	Ada11720 Human nov
119	25	100.0	224	3	AAB41848	Aab41848 Human ORF
120	25	100.0	224	3	AAG18324	Aag18324 Arabidops
121	25	100.0	227	3	AAB42807	Aab42807 Human ORF
122	25	100.0	228	4	ABB61466	Abb61466 Drosophil
123	25	100.0	229	2	AAY27341	Aay27341 Group B S
124	25	100.0	233	6	ABU20679	Abu20679 Protein e
125	25	100.0	234	6	ABM67953	Abm67953 Photorhab
126	25	100.0	235	5	ABP39305	Abp39305 Staphyloc
127	25	100.0	238	4	ABB67392	Abb67392 Drosophil
128	25	100.0	239	4	AAU25571	Aau25571 Human G P
129	25	100.0	239	4	AAU14717	Aau14717 Novel bon
130	25	100.0	239	5	AAU74333	Aau74333 Human cyt
131	25	100.0	240	4	AAB94472	Aab94472 Human pro
132	25	100.0	240	4	AAU30407	Aau30407 Novel hum
133	25	100.0	240	5	ABR01767	Abr01767 Human bre
134	25	100.0	240	6	ABU00151	Abu00151 Human nov
135	25	100.0	244	2	AAW77619	Aaw77619 Mercuric
136	25	100.0	244	5	ABG70228	Abg70228 Human pre
137	25	100.0	245	2	AAW64220	Aaw64220 Human sec
138	25	100.0	245	4	AAM93721	Aam93721 Human pol
139	25	100.0	245	4	AAB90730	Aab90730 Human CG3
140	25	100.0	246	6	ABU43385	Abu43385 Protein e
141	25	100.0	247	6	ABM71246	Abm71246 Staphyloc
142	25	100.0	250	6	ABU19873	Abu19873 Protein e
143	25	100.0	250	7	ADC31828	Adc31828 Human nov
144	25	100.0	251	5	AAE20104	Aae20104 Lactobaci
145	25	100.0	253	2	AAW04738	Aaw04738 Wasp veno
146	25	100.0	253	6	ABP79577	Abp79577 N. gonorr
147	25	100.0	255	6	ADA35127	Ada35127 Acinetoba
148	25	100.0	261	3	AAG13274	Aag13274 Arabidops
149	25	100.0	264	6	ABP77401	Abp77401 N. gonorr
150	25	100.0	267	3	AAG29599	Aag29599 Arabidops
151	25	100.0	269	5	ABB54124	Abb54124 Lactococc
152	25	100.0	269	6	ABU25900	Abu25900 Protein e
153	25	100.0	271	3	AAG29598	Aag29598 Arabidops
154	25	100.0	271	5	ABB90834	Abb90834 Herbicida
155	25	100.0	275	2	AAR99571	Aar99571 Wasp veno
156	25	100.0	275	2	AAW04737	Aaw04737 Wasp veno
157	25	100.0	275	2	AAW52127	Aaw52127 Insectici
158	25	100.0	275	3	AAG13273	Aag13273 Arabidops
159	25	100.0	280	7	ADE63384	Ade63384 Rat Prote
160	25	100.0	280	7	ADE63392	Ade63392 Rat Prote
161	25	100.0	280	7	ADE63388	Ade63388 Rat Prote
162	25	100.0	280	7	ADE63458	Ade63458 Rat Prote
163	25	100.0	280	7	ADE63396	Ade63396 Rat Prote
164	25	100.0	280	7	ADE63462	Ade63462 Rat Prote
165	25	100.0	280	7	ADD46359	Add46359 Rat Prote
166	25	100.0	281	3	AAG13272	Aag13272 Arabidops
167	25	100.0	281	3	AAG53052	Aag53052 Arabidops
168	25	100.0	281	6	ABM71661	Abm71661 Staphyloc
169	25	100.0	283	5	ABG30846	Abg30846 Human tyr
170	25	100.0	284	3	AAG11106	Aag11106 Arabidops
171	25	100.0	285	3	AAG29597	Aag29597 Arabidops
172	25	100.0	285	6	ABM68471	Abm68471 Photorhab
173	25	100.0	285	6	ABR41580	Abr41580 Human DIT
174	25	100.0	287	3	AAG38076	Aag38076 Arabidops
175	25	100.0	289	4	ABG15271	Abg15271 Novel hum
176	25	100.0	292	4	AAG82170	Aag82170 S. epider
177	25	100.0	292	6	ABM73000	Abm73000 Staphyloc
178	25	100.0	295	6	ADB08044	Adb08044 Alloiococ
179	25	100.0	296	2	AAY39883	Aay39883 MHC Class
180	25	100.0	296	6	ABU05274	Abu05274 Human exp
181	25	100.0	296	6	ABU07242	Abu07242 Human exp
182	25	100.0	296	7	ADE63460	Ade63460 Human Pro
183	25	100.0	296	7	ADE63398	Ade63398 Human Pro
184	25	100.0	296	7	ADE63394	Ade63394 Human Pro
185	25	100.0	296	7	ADE63386	Ade63386 Human Pro
186	25	100.0	296	7	ADE63390	Ade63390 Human Pro
187	25	100.0	296	7	ADD46361	Add46361 Human Pro
188	25	100.0	296	7	ADE63464	Ade63464 Human Pro
189	25	100.0	297	2	AAY38784	Aay38784 Neisseria
190	25	100.0	297	3	AAY74947	Aay74947 Neisseria
191	25	100.0	297	5	ABP38279	Abp38279 Staphyloc
192	25	100.0	297	6	ABU23174	Abu23174 Protein e
193	25	100.0	298	4	AAU03198	Aau03198 Dynamin c
194	25	100.0	300	6	ABU40108	Abu40108 Protein e
195	25	100.0	303	7	ADC00079	Adc00079 Enterohae
196	25	100.0	304	6	ADA11625	Ada11625 Human nov
197	25	100.0	305	2	AAR97836	Aar97836 Kaposi's
198	25	100.0	305	2	AAR93612	Aar93612 Kaposi's
199	25	100.0	307	4	ABG29631	Abg29631 Novel hum
200	25	100.0	307	6	ABP77715	Abp77715 N. gonorr

ALIGNMENTS

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RESULT 1
AAB08309
ID   AAB08309 standard; peptide; 8 AA.
XX
AC   AAB08309;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Amino acid sequence of antiangiogenic peptide DT-26.
XX
KW   Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
KW   VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuJ-7; tumour growth;
KW   tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
KW   leukaemia; lymphoma.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   4
FT                   /label= Aib
FT                   /note= "alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "amidated residue"
XX
PN   WO200047221-A1.
XX
PD   17-AUG-2000.
XX
PF   11-FEB-2000; 2000WO-US003559.
XX
PR   11-FEB-1999;   99US-00248381.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
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PI   Singh AT;
XX
DR   WPI; 2000-549083/50.
XX
PT   Novel therapeutically active composition comprising at least 5 peptides,
PT   useful for treating angiogenesis especially as a result of
PT   adenocarcinomas.
XX
PS   Claim 11; Page 31; 42pp; English.
XX
CC   AAB08304-15 represent peptides which have an antiangiogenic effect. The
CC   specification describes therapeutically active compositions comprising at
CC   least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
CC   least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
CC   VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
CC   receptor antagonist), BOM1 (a bombesin antagonist), and SP1 (a substance
CC   P antagonist). The combination of these 7 analogues is known as MuJ-7.
CC   MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
CC   by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
CC   metastasis through its antiangiogenic activity in all cancers. The
CC   peptides are useful for the treatment and prevention of angiogenesis,
CC   especially as a result of adenocarcinomas of the colon, breast, lung,
CC   prostate, kidney, leukemias or lymphomas
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|:||:||
Db          1 FQWXVGHI 8


RESULT 2
AAB08310
ID   AAB08310 standard; peptide; 8 AA.
XX
AC   AAB08310;
XX
DT   04-DEC-2000  (first entry)
XX
DE   Amino acid sequence of antiangiogenic peptide DT-27.
XX
KW   Vasoactive intestinal peptide; VIP; analogue; somatostatin; SOM1; SOM2;
KW   VIP1; VIP2; VIP3; BOM1; bombesin; SP1; substance P; MuJ-7; tumour growth;
KW   tumour angiogenesis; metastasis; cancer; angiogenesis; adenocarcinoma;
KW   leukaemia; lymphoma.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "amidated residue"
XX
PN   WO200047221-A1.
XX
PD   17-AUG-2000.
XX
PF   11-FEB-2000; 2000WO-US003559.
XX
PR   11-FEB-1999;   99US-00248381.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
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PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2000-549083/50.
XX
PT   Novel therapeutically active composition comprising at least 5 peptides,
PT   useful for treating angiogenesis especially as a result of
PT   adenocarcinomas.
XX
PS   Claim 11; Page 31; 42pp; English.
XX
CC   AAB08304-15 represent peptides which have an antiangiogenic effect. The
CC   specification describes therapeutically active compositions comprising at
CC   least one analogue of somatostatin (chosen from SOM1 and SOM2), and at
CC   least four analogues chosen from vasoactive intestinal peptide (VIP) 1 (a
CC   VIP antagonist), VIP2 (a VIP receptor binding inhibitor), VIP3 (a VIP
CC   receptor antagonist), BOM1 (a bombesin antagonist), and SP1 (a substance
CC   P antagonist). The combination of these 7 analogues is known as MuJ-7.
CC   MuJ-7 is used as an anticancer drug to restrict tumour growth and spread
CC   by inhibiting tumour angiogenesis. MuJ-7, in addition, inhibits
CC   metastasis through its antiangiogenic activity in all cancers. The
CC   peptides are useful for the treatment and prevention of angiogenesis,
CC   especially as a result of adenocarcinomas of the colon, breast, lung,
CC   prostate, kidney, leukemias or lymphomas
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::||||
Db          1 FQWAVXHI 8


RESULT 3
AAE10466
ID   AAE10466 standard; peptide; 8 AA.
XX
AC   AAE10466;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #4 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   4
FT                   /label= Aib
FT                   /note= "Alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
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DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 5; Page 22; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              ||:||:||
Db          1 XQWXVGHI 8


RESULT 4
AAE10467
ID   AAE10467 standard; peptide; 8 AA.
XX
AC   AAE10467;
XX
DT   10-DEC-2001  (first entry)
XX
DE   Synthetic peptide #5 possessing antagonist properties against bombesin.
XX
KW   Bombesin; therapy; malignant disease; alpha,alpha-dialkylated amino acid;
KW   cancer; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "Alpha-aminoisobutyric acid"
FT   Modified-site   8
FT                   /note= "C-terminal amide"
XX
PN   WO200162777-A1.
XX
PD   30-AUG-2001.
XX
PF   31-JUL-2000; 2000WO-US020873.
XX
PR   24-FEB-2000; 2000IN-DE000147.
XX
PA   (DABU-) DABUR RES FOUND.
PA   (CORD/) CORD J I.
XX
PI   Burman AC,  Prasad S,  Mukherjee R,  Jaggi M,  Singh AT,  Mathur A;
XX
DR   WPI; 2001-582040/65.
XX
PT   New peptide or its salt that are antagonists to bombesin and bombesin
PT   like peptides useful in the treatment of cancer.
XX
PS   Claim 6; Page 22; 35pp; English.
XX
CC   The present invention relates to a peptide or its salt that are
CC   antagonists to bombesin and bombesin-like peptide. The invention is used
CC   for treatment or prevention of cancer or malignant diseases in mammals.
CC   The alpha,alpha-dialkylated amino acids present in the peptide analogues
CC   induces highly specific constraints in the peptide backbone. The present
CC   sequence is a synthetic peptide #1 possessing antagonist properties
CC   against bombesin and bombesin-like peptide
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 8;
  Best Local Similarity   75.0%;  Pred. No. 1.4e+06;
  Matches    6;  Conservative    2;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              ||::||||
Db          1 XQWAVXHI 8


RESULT 5
ABU08882
ID   ABU08882 standard; peptide; 8 AA.
XX
AC   ABU08882;
XX
DT   18-SEP-2003  (first entry)
XX
DE   Antiangiogenic MuJ-7 synthetic peptide, DT-27.
XX
KW   Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
KW   VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
KW   cell proliferation; autocrine; antagonist; receptor binding inhibitor;
KW   endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;
KW   lung; prostate; kidney; leukaemia; lymphoma; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   6
FT                   /label= Aib
FT                   /note= "2-amino-isobutyric acid"
XX
PN   US6492330-B1.
XX
PD   10-DEC-2002.
XX
PF   11-FEB-1999;   99US-00248381.
XX
PR   16-AUG-1996;   96IN-DE001822.
PR   08-OCT-1996;   96US-00727679.
PR   11-FEB-1998;   98IN-DE000342.
PR   02-APR-1998;   98US-0080433P.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2003-531016/50.
XX
PT   An isolated peptide having specific sequence, useful for treating and/or
PT   preventing angiogenesis, or for inhibiting the proliferation or migration
PT   of tumor or cancer cells.
XX
PS   Claim 1; Col 31; 22pp; English.
XX
CC   The invention discloses an isolated peptide having a specific sequence,
CC   which can be used for treating and/or preventing angiogenesis. Also
CC   disclosed is the use of a combination of a peptides, termed MuJ-7, as an
CC   anticancer drug in restricting tumour growth by inhibiting tumour
CC   angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
CC   Substance P (SP) and Bombesin (BOM) are all secreted by at least some
CC   human tumour and cancer cells and there are binding sites for these
```

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CC   peptides on these cells. It may be that they aid cell proliferation
CC   through an autocrine mechanism. Antagonists to these peptides (e.g. a
CC   somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
CC   a VIP receptor antagonist, a bombesin antagonist and a substance P
CC   antagonist), or a combination comprises an amount of each peptide, may be
CC   effective to inhibit the proliferation of endothelial cells, tumour or
CC   cancer cells, to inhibit migration of tumour or cancer cells or to
CC   modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
CC   cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
CC   or leukaemia or lymphoma. The sequence presented is the antiangiogenic
CC   MuJ-7 synthetic peptide, DT-27
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::||||
Db          1 FQWAVXHI 8


RESULT 6
ABU08881
ID   ABU08881 standard; peptide; 8 AA.
XX
AC   ABU08881;
XX
DT   18-SEP-2003  (first entry)
XX
DE   Antiangiogenic MuJ-7 synthetic peptide, DT-26.
XX
KW   Angiogenesis; MuJ-7; anticancer; tumour; vasoactive intestinal peptide;
KW   VIP; somatostatin; SOM; substance P; SP; bombesin; BOM; human;
KW   cell proliferation; autocrine; antagonist; receptor binding inhibitor;
KW   endothelial cell; cancer; hypersecretion; adenocarcinoma; colon; breast;
KW   lung; prostate; kidney; leukaemia; lymphoma; cytostatic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1
FT                   /note= "D-form residue"
FT   Modified-site   4
FT                   /label= Aib
FT                   /note= "2-amino-isobutyric acid"
XX
PN   US6492330-B1.
XX
PD   10-DEC-2002.
XX
PF   11-FEB-1999;   99US-00248381.
XX
PR   16-AUG-1996;   96IN-DE001822.
PR   08-OCT-1996;   96US-00727679.
PR   11-FEB-1998;   98IN-DE000342.
PR   02-APR-1998;   98US-0080433P.
XX
PA   (NAIM-) NAT INST IMMUNOLOGY.
PA   (DABU-) DABUR RES FOUND.
XX
PI   Mukherjee R,  Jaggi M,  Prasad S,  Burman AC,  Rajendran P,  Mathur A;
PI   Singh AT;
XX
DR   WPI; 2003-531016/50.
XX
PT   An isolated peptide having specific sequence, useful for treating and/or
PT   preventing angiogenesis, or for inhibiting the proliferation or migration
PT   of tumor or cancer cells.
XX
PS   Claim 1; Col 31; 22pp; English.
XX
```

```
CC   The invention discloses an isolated peptide having a specific sequence,
CC   which can be used for treating and/or preventing angiogenesis. Also
CC   disclosed is the use of a combination of a peptides, termed MuJ-7, as an
CC   anticancer drug in restricting tumour growth by inhibiting tumour
CC   angiogenesis. Vasoactive intestinal peptide (VIP), Somatostatin (SOM),
CC   Substance P (SP) and Bombesin (BOM) are all secreted by at least some
CC   human tumour and cancer cells and there are binding sites for these
CC   peptides on these cells. It may be that they aid cell proliferation
CC   through an autocrine mechanism. Antagonists to these peptides (e.g. a
CC   somatostatin analog, a VIP antagonist, a VIP receptor binding inhibitor,
CC   a VIP receptor antagonist, a bombesin antagonist and a substance P
CC   antagonist), or a combination comprises an amount of each peptide, may be
CC   effective to inhibit the proliferation of endothelial cells, tumour or
CC   cancer cells, to inhibit migration of tumour or cancer cells or to
CC   modulate the hypersecretion of VIP, SOM, BOM or SP. The tumour or cancer
CC   cells are adenocarcinomas of the colon, breast, lung, prostate or kidney,
CC   or leukaemia or lymphoma. The sequence presented is the antiangiogenic
CC   MuJ-7 synthetic peptide, DT-26
XX
SQ   Sequence 8 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 8;
  Best Local Similarity   62.5%;  Pred. No. 1.4e+06;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|:||:||
Db          1 FQWXVGHI 8


RESULT 7
AAU17831
ID   AAU17831 standard; protein; 35 AA.
XX
AC   AAU17831;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Novel human respiratory antigen #147.
XX
KW   Human; respiratory antigen; respiratory disorder; throat disorder;
KW   lung disorder; nose disorder; lung cancer; gene therapy; cytostatic;
KW   anti allergic; anti asthmatic; anti inflammatory; olfactory;
KW   respiratory active.
XX
OS   Homo sapiens.
XX
PN   WO200155448-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001333.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
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PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
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PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
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XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-476224/51.
DR N-PSDB; AAS28015.
XX
PT Isolated polypeptide for treating, preventing and/ or prognosing
PT disorders related to the respiratory system including respiratory cancers
PT and also for testing and detection e.g. diagnosis.
XX
PS Claim 11; SED ID No 449; 546pp; English.
XX
CC The present invention relates to the isolation of novel human respiratory
CC antigens, and cDNA (AAS27869-AAS28159) and genomic sequences encoding for
CC these polypeptides. The sequences of the invention are useful for
CC preventing, treating and/or prognosing disorders related to the
CC respiratory system including throat disorders (e.g. vocal cord paralysis,
CC tonsillitis, and laryngitis), lung disorders e.g. pneumonia, allergic
CC disorders e.g. asthma, pleurisy, cystic fibrosis, emphysema, nose
CC disorders and cancers of the respiratory tissues e.g. lung cancer. The
CC polynucleotide sequences of the invention are useful in gene therapy and
CC antisense therapy. AAU17685-AAU17975 represent novel human respiratory
CC antigens. Note: The sequence data for this patent did not form part of
CC the printed specification, but was obtained in electronic format directly
CC from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 35 AA;

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  Best Local Similarity  50.0%;  Pred. No. 5.6e+02;
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Db         25 KQERVVHI 32


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ID   AAM86667 standard; protein; 37 AA.
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XX
DT   07-NOV-2001  (first entry)
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DE   Human immune/haematopoietic antigen SEQ ID NO:14260.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
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PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
DR   N-PSDB; AAK59448.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Claim 11; SEQ ID NO 14260; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 37 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 37;
  Best Local Similarity   50.0%;  Pred. No. 6e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
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Db         29 YQSLVLHI 36


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XX
AC   AAM89543;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen SEQ ID NO:17136.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
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XX
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XX
PA   (HUMA-), HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-483426/52.
DR   N-PSDB; AAK62324.
XX
PT   Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT   useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS   Claim 11; SEQ ID NO 17136; 3071pp + Sequence Listing; English.
XX
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 43 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 43;
  Best Local Similarity    50.0%;  Pred. No. 7.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         23 LQSGVWHI 30


RESULT 10
AAO22575
ID   AAO22575 standard; peptide; 44 AA.
XX
AC   AAO22575;
XX
DT   28-OCT-2002  (first entry)
XX
DE   Wooden leg (WOL) gene related peptide #3.
XX
KW   Wooden leg; WOL; vasculature; transgenic plant; agronomic; longer root;
KW   wood production; plant; promoter; tree; crop plant.
XX
OS   Unidentified.
XX
PN   WO200244337-A2.
XX
PD   06-JUN-2002.
XX
PF   29-NOV-2001; 2001WO-US045053.
XX
PR   29-NOV-2000; 2000US-0253739P.
XX
PA   (UYNY ) UNIV NEW YORK STATE.
PA   (HELA/) HELARIUTTA Y.
PA   (MAHO/) MAHONEN A P.
PA   (BONK/) BONKE A W M.
PA   (KAUP/) KAUPPINEN L.
PA   (RIIK/) RIIKONEN M.
XX
PI   Helariutta Y,  Mahonen AP,  Bonke AWM,  Kauppinen L,  Riikonen M;
```

PI Benfey PN;
XX
DR WPI; 2002-599423/64.
XX
PT Novel isolated polypeptide (WOODEN LEG) with ability to regulate a set of
PT asymmetric cell divisions that establish vascular tissue in root and
PT hypocotyl development, useful for improving agronomically valuable
PT plants.
XX
PS Disclosure; Fig 3; 187pp; English.
XX
CC The invention relates to an isolated WOODEN LEG (WOL) polypeptide,
CC comprising 15 contiguous amino acids of a fully defined Arabidopsis
CC WOODEN LEG protein sequence of 1057 amino acids as given in the
CC specification, and to its encoding nucleic acid. The invention also
CC relates to an amino acid sequence of domains of protein, e.g., N-terminal
CC region, C-terminal domain, etc; or is a naturally occurring allelic
CC variant of the above mentioned polypeptide sequence. Expression levels of
CC the nucleic acid can be modified to improve the vasculature in transgenic
CC plants and enhance the agronomic properties of such plants. Also the WOL
CC promoter is used to drive expression of a heterologous coding sequence of
CC trees to improve wood production. The WOL nucleic acid may be used as a
CC molecular marker for a qualitative trait loci, e.g., longer roots or
CC enhanced wood production, in molecular breeding of crop plants. The
CC nucleic acid is also useful in DNA amplification assays to identify the
CC endogenous WOL genes, WOL mutant alleles and/or WOL expression products
CC in cultivars as compared to wild-type plants. They can also be used as
CC markers for linkage analysis of qualitative trait loci. The WOL protein
CC and/or antibodies can be used as diagnostic reagents in immunoassays to
CC detect expression of the WOL gene in cultivars and wild-type plants. The
CC WOL protein, its encoding nucleic acid, and its corresponding antibody
CC are useful for improving agronomically valuable plants e.g., trees. This
CC sequence represents a peptide relating to the wooden leg (WOL) protein of
CC the invention
XX
SQ Sequence 44 AA;

```
  Query Match             100.0%;  Score 25;  DB 5;  Length 44;
  Best Local Similarity   50.0%;  Pred. No. 7.3e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db          7 AQETVSHI 14
```

RESULT 11
AAM14639
ID AAM14639 standard; protein; 47 AA.
XX
AC AAM14639;
XX
DT 12-OCT-2001 (first entry)
XX
DE Peptide #1073 encoded by probe for measuring cervical gene expression.
XX
KW Probe; human; microarray; gene expression; cervical epithelial cell;
KW cervical cancer.
XX
OS Homo sapiens.
XX
PN WO200157278-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000670.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-488901/53.
XX
PT Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human cervical epithelial cells.
XX
PS Claim 27; SEQ ID NO 19465; 487pp; English.
XX
CC The present invention relates to human single exon nucleic acid probes
CC (SENP: see AAI10068-AAI28459). The present sequence is a peptide encoded
CC by one such probe. The SENPs are derived from human HeLa cells. The SENPs
CC can be used to produce a single exon microarray, which can be used for
CC measuring human gene expression in a sample derived from human cervical
CC epithelial cells. By measuring gene expression, the probes are therefore
CC useful in grading and/or staging of diseases of the cervix, notably
CC cervical cancer. Note: The sequence data for this patent did not form
CC part of the printed specification, but was obtained in electronic format
CC directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 47 AA;

```
  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39
```

RESULT 12
ABB33599
ID ABB33599 standard; peptide; 47 AA.
XX
AC ABB33599;
XX
DT 04-FEB-2002 (first entry)
XX
DE Peptide #1105 encoded by human foetal liver single exon probe.
XX
KW Human; foetal liver; gene expression; single exon nucleic acid probe.
XX
OS Homo sapiens.
XX
PN WO200157277-A2.
XX
PD 09-AUG-2001.
XX
PF 30-JAN-2001; 2001WO-US000669.
XX
PR 04-FEB-2000; 2000US-0180312P.
PR 26-MAY-2000; 2000US-0207456P.
PR 30-JUN-2000; 2000US-00608408.
PR 03-AUG-2000; 2000US-00632366.
PR 21-SEP-2000; 2000US-0234687P.
PR 27-SEP-2000; 2000US-0236359P.
PR 04-OCT-2000; 2000GB-00024263.
XX
PA (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI Penn SG, Hanzel DK, Chen W, Rank DR;
XX
DR WPI; 2001-483447/52.
XX
PT Human genome-derived single exon nucleic acid probes useful for analyzing
PT gene expression in human fetal liver.
XX
PS Claim 27; SEQ ID NO 26234; 639pp + Sequence Listing; English.

```
XX
CC   The invention relates to a single exon nucleic acid probe for measuring
CC   human gene expression in a sample derived from human foetal liver. The
CC   single exon nucleic acid probes may be used for predicting, measuring and
CC   displaying gene expression in samples derived from human fetal liver. The
CC   present sequence is a peptide encoded by a single exon nucleic acid probe
CC   of the invention. Note: The sequence data for this patent did not form
CC   part of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 13
AAM27059
ID   AAM27059 standard; protein; 47 AA.
XX
AC   AAM27059;
XX
DT   17-OCT-2001  (first entry)
XX
DE   Peptide #1096 encoded by probe for measuring placental gene expression.
XX
KW   Probe; microarray; human; placenta; antenatal diagnosis;
KW   genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200157272-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000663.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488897/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human placenta.
XX
PS   Claim 27; SEQ ID NO 27328; 654pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes (SENP:
CC   see AAI31315-AAI57546). The present sequence is a peptide encoded by one
CC   such probe. The probes are useful for producing a microarray for
CC   predicting, measuring and displaying gene expression in samples derived
CC   from human placenta. The probes are useful for antenatal diagnosis of
CC   human genetic disorders
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 14
ABB28419
ID   ABB28419 standard; peptide; 47 AA.
XX
AC   ABB28419;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Peptide #1070 encoded by breast cell single exon nucleic acid probe.
XX
KW   Human; microarray; single exon probe; gene expression; breast; disease;
KW   cancer.
XX
OS   Homo sapiens.
XX
PN   WO200157271-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000662.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-496933/54.
XX
PT   New spatially-addressable set of single exon nucleic acid probes, useful
PT   for measuring gene expression in sample derived from human breast,
PT   comprises number of single exon nucleic acid probes.
XX
PS   Claim 27; SEQ ID NO 11387; 327pp + Sequence Listing; English.
XX
CC   The invention relates to a spatially-addressable set of single exon
CC   nucleic acid probes for measuring gene expression in a sample derived
CC   from human breast and BT 474 cells. The method involves contacting the
CC   probes with a collection of detectably labelled nucleic acids derived
CC   from mRNA of human breast, and then measuring the label bound to each
CC   probe of the microarray. The probes are useful for verifying the
CC   expression of regions of genomic DNA predicted to encode proteins. They
CC   are useful for gene discovery, and for determining predisposition and/or
CC   prognosing breast disease. Gene expression analysis is useful for
CC   assessing the toxicity of chemical agents on cells. The microarray of
CC   this invention presents a far greater diversity of probes for measuring
CC   gene expression, with far less bias than expressed sequence tag
CC   microarrays. The method is suitable for rapid production of functional
CC   information from genomic sequence. The present sequence is a peptide
CC   encoded by a single exon nucleic acid probe of the invention. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 15
ABB28420
ID   ABB28420 standard; peptide; 47 AA.
XX
AC   ABB28420;
XX
DT   01-FEB-2002  (first entry)
XX
DE   Peptide #1071 encoded by breast cell single exon nucleic acid probe.
XX
KW   Human; microarray; single exon probe; gene expression; breast; disease;
KW   cancer.
XX
OS   Homo sapiens.
XX
PN   WO200157271-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000662.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-496933/54.
XX
PT   New spatially-addressable set of single exon nucleic acid probes, useful
PT   for measuring gene expression in sample derived from human breast,
PT   comprises number of single exon nucleic acid probes.
XX
PS   Claim 27; SEQ ID NO 11387; 327pp + Sequence Listing; English.
XX
CC   The invention relates to a spatially-addressable set of single exon
CC   nucleic acid probes for measuring gene expression in a sample derived
CC   from human breast and BT 474 cells. The method involves contacting the
CC   probes with a collection of detectably labelled nucleic acids derived
CC   from mRNA of human breast, and then measuring the label bound to each
CC   probe of the microarray. The probes are useful for verifying the
CC   expression of regions of genomic DNA predicted to encode proteins. They
CC   are useful for gene discovery, and for determining predisposition and/or
CC   prognosing breast disease. Gene expression analysis is useful for
CC   assessing the toxicity of chemical agents on cells. The microarray of
CC   this invention presents a far greater diversity of probes for measuring
CC   gene expression, with far less bias than expressed sequence tag
CC   microarrays. The method is suitable for rapid production of functional
CC   information from genomic sequence. The present sequence is a peptide
CC   encoded by a single exon nucleic acid probe of the invention. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
```

```
              :|::|:||
Db          32 KQKGVFHI 39


RESULT 15
ABB19054
ID   ABB19054 standard; protein; 47 AA.
XX
AC   ABB19054;
XX
DT   23-JAN-2002  (first entry)
XX
DE   Protein #1053 encoded by probe for measuring heart cell gene expression.
XX    /
KW   Human; gene expression; heart; microarray; vascular system;
KW   cardiovascular disease; hypertension; cardiac arrhythmia;
KW   congenital heart disease.
XX
OS   Homo sapiens.
XX
PN   WO200157274-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000666.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488899/53.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   hearts.
XX
PS   Claim 15; SEQ ID NO 20824; 530pp; English.
XX
CC   The present invention relates to single exon nucleic acid probes for
CC   measuring human gene expression in a sample derived from human heart (see
CC   ABA21535-ABA41305). The present sequence is a protein encoded by one such
CC   probe. The probes may be used for predicting, measuring and displaying
CC   gene expression in samples derived from the human heart via microarrays.
CC   By measuring gene expression, the probes are useful for predicting,
CC   diagnosing, grading, staging, monitoring and prognosing diseases of the
CC   human heart and vascular system e.g. cardiovascular disease,
CC   hypertension, cardiac arrhythmias and congenital heart disease. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db          32 KQKGVFHI 39


RESULT 16
AAM66773
ID   AAM66773 standard; protein; 47 AA.
XX
AC   AAM66773;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human bone marrow expressed probe encoded protein SEQ ID NO: 27079.
XX
KW   Human; bone marrow expressed exon; gene expression analysis; probe;
KW   microarray; cancer; leukaemia; lymphoma; myeloma.
XX
OS   Homo sapiens.
XX
PN   WO200157276-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000668.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488900/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human bone marrow.
XX
PS   Example 4; SEQ ID NO 27079; 658pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   bone marrow. They can be used to measure gene expression in bone marrow
CC   samples, which may enable the improved diagnosis and treatment of cancers
CC   such as lymphoma, leukaemia and myeloma. The present sequence is a
CC   protein encoded by one of the probes of the invention
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db          32 KQKGVFHI 39


RESULT 17
AAM54372
ID   AAM54372 standard; protein; 47 AA.
XX
AC   AAM54372;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human brain expressed single exon probe encoded protein SEQ ID NO: 26477.
XX
KW   Human; brain expressed exon; gene expression analysis; probe; microarray;
KW   Alzheimer's disease; multiple sclerosis; schizophrenia; epilepsy; cancer.
XX
OS   Homo sapiens.
XX
PN   WO200157275-A2.
XX
PD   09-AUG-2001.
XX
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```
PF   30-JAN-2001; 2001WO-US000667.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-483446/52.
XX
PT   Single exon nucleic acid probes for analyzing gene expression in human
PT   brains.
XX
PS   Example 4; SEQ ID NO 26477; 650pp + Sequence Listing; English.
XX
CC   The present invention provides a number of single exon nucleic acid
CC   probes which are derived from genomic sequences expressed in the human
CC   brain. They can be used to measure gene expression in brain cell samples,
CC   which may enable the diagnosis and improved treatment of nervous system
CC   diseases such as Alzheimer's disease, multiple sclerosis, schizophrenia,
CC   epilepsy and cancers. The present sequence is a protein encoded by one of
CC   the probes of the invention
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 18
ABG48442
ID   ABG48442 standard; peptide; 47 AA.
XX
AC   ABG48442;
XX
DT   25-FEB-2003  (first entry)
XX
DE   Human liver peptide, SEQ ID No 27090.
XX
KW   Human; liver; cirrhosis; hyperlipoproteinaemia; hyperlipidaemia;
KW   hypercholesterolaemia; coronary heart disease.
XX
OS   Homo sapiens.
XX
PN   WO200157273-A2.
XX
PD   09-AUG-2001.
XX
PF   30-JAN-2001; 2001WO-US000664.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-488898/53.
XX
PT   Human genome-derived single exon nucleic acid probes useful for analyzing
PT   gene expression in human adult liver.
XX
PS   Claim 27; SEQ ID NO 27090; 658pp; English.
XX
CC   The invention relates to a single exon nucleic acid probe (SENP) (I) for
CC   measuring human gene expression in a sample derived from human adult
CC   liver, comprising one of 13109 defined nucleotide sequences given in the
CC   specification (or complements/ fragments). The probe hybridises at high
CC   stringency to a nucleic acid molecule expressed in the human adult liver.
CC   (I) may be used for predicting, measuring and displaying gene expression
CC   in samples derived from human adult liver. The genes identified may be
CC   involved in genetic liver diseases such as cirrhosis,
CC   hyperlipoproteinaemia, hyperlipidaemia and hypercholesterolaemia which is
CC   associated with coronary heart disease. ABG47348-ABG59930 represent human
CC   liver single exon encoded peptides of the invention. Note: The sequence
CC   information for this patent does not appear in the printed specification
CC   but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 19
AAM02364
ID   AAM02364 standard; protein; 47 AA.
XX
AC   AAM02364;
XX
DT   09-OCT-2001  (first entry)
XX
DE   Peptide #1046 encoded by probe for measuring breast gene expression.
XX
KW   Probe; human; breast disease; breast cancer; development disorder;
KW   inflammatory disease; proliferative breast disease; non-carcinoma tumour.
XX
OS   Homo sapiens.
XX
PN   WO200157270-A2.
XX
PD   09-AUG-2001.
XX
PF   29-JAN-2001; 2001WO-US000661.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2001-476286/51.
XX
PT   Novel single exon nucleic acid probe used to measuring gene expression in
PT   a human breast.
XX
PS   Claim 27; SEQ ID NO 11104; 322pp; English.
XX
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CC   The present invention relates to novel single exon nucleic acid probes
CC   (see AAI00010-AAI10067). The present sequence is a peptide encoded by one
CC   such probe. The probes are useful for measuring human gene expression in
CC   a human breast sample, where the probe hybridises at high stringency to a
CC   nucleic acid expressed in the human breast. The probes are useful for
CC   predicting, diagnosing, grading, staging, monitoring and prognosing
CC   diseases of the human breast, particularly those diseases with polygenic
CC   aetiology. The diseases include: breast cancer, disorders of development,
CC   inflammatory diseases of the breast, fibrocystic changes, proliferative
CC   breast disease and non-carcinoma tumours. Note: The sequence data for
CC   this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 20
ABG36428
ID   ABG36428 standard; peptide; 47 AA.
XX
AC   ABG36428;
XX
DT   19-AUG-2002  (first entry)
XX
DE   Human peptide encoded by genome-derived single exon probe SEQ ID 26093.
XX
KW   Human; single exon probe; asthma; lung cancer; COPD; ILD;
KW   chronic obstructive pulmonary disease; interstitial lung disease;
KW   familial idiopathic pulmonary fibrosis; neurofibromatosis;
KW   tuberous sclerosis; Gaucher's disease; Niemann-Pick disease;
KW   Hermansky-Pudlak syndrome; sarcoidosis; pulmonary haemosiderosis;
KW   pulmonary histiocytosis; lymphangioleiomyomtosis; Karagener syndrome;
KW   pulmonary alveolar proteinosis; fibrocystic pulmonary dysplasia;
KW   primary ciliary dyskinesis; pulmonary hypertension;
KW   hyaline membrane disease.
XX
OS   Homo sapiens.
XX
PN   WO200186003-A2.
XX
PD   15-NOV-2001.
XX
PF   30-JAN-2001; 2001WO-US000665.
XX
PR   04-FEB-2000; 2000US-0180312P.
PR   26-MAY-2000; 2000US-0207456P.
PR   30-JUN-2000; 2000US-00608408.
PR   03-AUG-2000; 2000US-00632366.
PR   21-SEP-2000; 2000US-0234687P.
PR   27-SEP-2000; 2000US-0236359P.
PR   04-OCT-2000; 2000GB-00024263.
XX
PA   (MOLE-) MOLECULAR DYNAMICS INC.
XX
PI   Penn SG,  Hanzel DK,  Chen W,  Rank DR;
XX
DR   WPI; 2002-114183/15.
XX
PT   Spatially-addressable set of single exon nucleic acid probes, used to
PT   measure gene expression in human lung samples.
XX
PS   Claim 27; SEQ ID NO 26093; 634pp; English.
XX
CC   The invention relates to a spatially-addressable set of single exon
CC   nucleic acid probes for measuring gene expression in a sample derived
CC   from human lung comprising single exon nucleic acid probes having one of
CC   12614 nucleic acid sequences mentioned in the specification, or their
CC   complements or the 12387 open reading frames derived from the 12614
CC   probes. Also included are a microarray comprising the novel set of probes
CC   ; the novel set of probes which hybridise at high stringency to a nucleic
CC   acid expressed in the human lung; measuring gene expression in a sample
CC   derived from human lung, comprising (a) contacting the array with a
CC   collection of detectably labeled nucleic acids derived from human lung
CC   mRNA, and (b) measuring the label detectably bound to each probe of the
CC   array; identifying exons in a eukaryotic genome, comprising (a)
CC   algorithmically predicting at least one exon from genomic sequences of
CC   the eukaryote; and (b) detecting specific hybridisation of detectably
CC   labeled nucleic acids from eukaryote lung mRNA, to a single exon probe,
CC   having a fragment identical to the predicted exon, the probe is included
CC   in the above mentioned microarray; assigning exons to a single gene,
CC   comprising (a) identifying exons from genomic sequence by the method
CC   above and (b) measuring the expression of each of the exons in several
CC   tissues and/or cell types using hybridisation to a single exon
CC   microarrays having a probe with the exon, where a common pattern of
CC   expression of the exons in the tissues and/or cell types indicates that
CC   the exons should be assigned to a single gene; a peptide comprising one
CC   of 12011 sequences, mentioned in the specification, or encoded by the
CC   probes/open reading frames (ORF). The probes are used for gene expression
CC   analysis, and for identifying exons in a gene, particularly using human
CC   lung derived mRNA and for the study of lung diseases such as asthma, lung
CC   cancer, chronic obstructive pulmonary disease (COPD), interstitial lung
CC   disease (ILD), familial idiopathic pulmonary fibrosis, neurofibromatosis,
CC   tuberous sclerosis, Gaucher's disease, Niemann-Pick disease, Hermansky-
CC   Pudlak syndrome, sarcoidosis, pulmonary haemosiderosis, pulmonary
CC   histiocytosis, lymphangioleiomyomtosis, pulmonary alveolar proteinosis,
CC   Karagener syndrome, fibrocystic pulmonary dysplasia, primary ciliary
CC   dyskinesis, pulmonary hypertension and hyaline membrane disease. The
CC   present sequence is a peptide/protein encoded by a single exon probe of
CC   the invention. Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 47 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 47;
  Best Local Similarity   50.0%;  Pred. No. 7.9e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 21
AAB54011
ID   AAB54011 standard; protein; 53 AA.
XX
AC   AAB54011;
XX
DT   09-MAR-2001  (first entry)
XX
DE   Human pancreatic cancer antigen protein sequence SEQ ID NO:463.
XX
KW   Human; pancreas; pancreatic cancer; pancreatic cancer antigen; detection;
KW   diagnosis; identification; cytostatic; neuroprotective; nootropic;
KW   immunomodulatory; relaxant; contraceptive; gynaecological;
KW   antiinflammatory; cardiant; gene therapy; chromosome mapping;
KW   linkage analysis; tissue identification; tissue typing; forensic; neural;
KW   immune system; muscular; reproductive; gastrointestinal; pulmonary;
KW   cardiovascular; renal; proliferative.
XX
OS   Homo sapiens.
XX
PN   WO200055320-A1.
XX
PD   21-SEP-2000.
XX
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PF   08-MAR-2000; 2000WO-US005989.
XX
PR   12-MAR-1999;   99US-0124270P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2000-579444/54.
DR   N-PSDB; AAC98776.
XX
PT   New nucleic acid that is a pancreatic cancer antigen for preventing,
PT   treating, or ameliorating a medical condition, particular pancreatic
PT   cancer, or for use in assays for diagnosing a pathological condition.
XX
PS   Claim 11; Page 903; 1379pp; English.
XX
CC   AAC98773 to AAC99231 encode the human pancreatic cancer associated
CC   proteins, called pancreatic cancer antigens, given in AAB54008 to
CC   AAB54466. The human pancreatic cancer antigens have cytostatic,
CC   neuroprotective, nootropic, immunomodulatory, relaxant, contraceptive,
CC   gynaecological, cardiant and antiinflammatory activities, and can be used
CC   in gene therapy. The polynucleotide and proteins can be used for
CC   preventing, treating, or ameliorating a medical condition or in assays
CC   for diagnosing a pathological condition or a susceptibility to one in a
CC   subject. Binding partners to the proteins and the activity of the
CC   proteins can be identified. The pancreatic cancer antigens can be used to
CC   detect, treat or prevent pancreatic disorders, especially cancer.
CC   Agonists and antagonists to the antigens can be screened for. The
CC   pancreatic cancer antigen polynucleotides can be used to design nucleic
CC   acid hybridisation probes that can be used in chromosome mapping, linkage
CC   analysis, tissue identification and/or typing and a variety of forensic
CC   and diagnostic methods. The proteins can be used to generate antibodies
CC   which are used to purify, detect and target the polypeptides, including
CC   both in vivo and in vitro diagnostic and therapeutic methods. The
CC   proteins can be used to treat or prevent neural, immune system, muscular,
CC   reproductive, gastrointestinal, pulmonary, cardiovascular, renal or
CC   proliferative disorders. AAC99232 to AAC99240 and AAB54467 represent
CC   sequences used in the exemplification of the present invention
XX
SQ   Sequence 53 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 53;
  Best Local Similarity   50.0%;  Pred. No. 9.1e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         24 VQIRVSHI 31


RESULT 22
AAU45934
ID   AAU45934 standard; protein; 55 AA.
XX
AC   AAU45934;
XX
DT   27-FEB-2002  (first entry)
XX
DE   Propionibacterium acnes immunogenic protein #6830.
XX
KW   SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;
KW   uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;
KW   inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
KW   dermatological; osteopathic; neuroprotectant.
XX
OS   Propionibacterium acnes.
XX
PN   WO200181581-A2.
XX
PD   01-NOV-2001.
XX
PF   20-APR-2001; 2001WO-US012865.
XX
PR   21-APR-2000; 2000US-0199047P.
PR   02-JUN-2000; 2000US-0208841P.
PR   07-JUL-2000; 2000US-0216747P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Skeiky YAW,  Persing DH,  Mitcham JL,  Wang SS,  Bhatia A;
PI   L'maisonneuve J,  Zhang Y,  Jen S,  Carter D;
XX
DR   WPI; 2001-616774/71.
DR   N-PSDB; AAS59529.
XX
PT   Propionibacterium acnes polypeptides and nucleic acids useful for
PT   vaccinating against and diagnosing infections, especially useful for
PT   treating acne vulgaris.
XX
PS   Example 1; SEQ ID NO 7129; 1069pp; English.
XX
CC   Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic
CC   polypeptides. The proteins and their associated DNA sequences are used in
CC   the treatment, prevention and diagnosis of medical conditions caused by
CC   P. acnes. The disorders include SAPHO syndrome (synovitis, acne,
CC   pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis.
CC   P. acnes is also involved in infections of bone, joints and the central
CC   nervous system, however it is particularly involved in the inflammatory
CC   lesions associated with acne vulgaris. A method for detecting the
CC   presence or absence of P. acnes in a patient comprises contacting a
CC   sample with a binding agent that binds to the proteins of the invention
CC   and determining the amount of bound protein in the sample. The
CC   polypeptides may be used as antigens in the production of antibodies
CC   specific for P. acnes proteins. These antibodies can be used to
CC   downregulate expression and activity of P. acnes polypeptides and
CC   therefore treat P. acnes infections. The antibodies may also be used as
CC   diagnostic agents for determining P. acnes presence, for example, by
CC   enzyme linked immunosorbent assay (ELISA). Note: The sequence data for
CC   this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 55 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 55;
  Best Local Similarity   50.0%;  Pred. No. 9.5e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         10 TQRVVRHI 17


RESULT 23
ABM42453
ID   ABM42453 standard; protein; 55 AA.
XX
AC   ABM42453;
XX
DT   20-OCT-2003  (first entry)
XX
DE   Propionibacterium acnes predicted ORF-encoded polypeptide #7129.
XX
KW   Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;
KW   immunostimulant; immune response; vaccine.
XX
OS   Propionibacterium acnes.
XX
PN   WO2003033515-A1.
XX
PD   24-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032727.
XX
PR   15-OCT-2001; 2001US-00978825.
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```
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Mitcham JL,  Skeiky YAW,  Persing DH,  Bhatia A,  Maisonneuve JL;
PI   Zhang Y,  Wang S,  Jen S,  Lodes MJ,  Benson DR,  Jones R,  Carter D;
PI   Barth B,  Vallieve-Douglass J;
XX
DR   WPI; 2003-381789/36.
DR   N-PSDB; ACF64458.
XX
PT   New Propionibacterium acnes polypeptides and polynucleotides encoding the
PT   polypeptide, useful for diagnosing, preventing or treating acne vulgaris,
PT   or for stimulating an immune response specific for a P. acnes protein.
XX
PS   Example 1; SEQ ID NO 7129; 1481pp; English.
XX
CC   The invention relates to an isolated polynucleotide (ACF64435-ACF64733)
CC   encoding a Propionibacterium acnes protein. The invention also relates to
CC   polypeptides encoded by the polynucleotides (ABM35624-ABM64536) and to
CC   immunogenic fragments of P. acnes polypeptides. The invention
CC   additionally encompasses expression vectors and host cells comprising a
CC   polynucleotide of the invention; antibodies against polypeptides of the
CC   invention; fusion proteins comprising a polypeptide of the invention; a
CC   method for stimulating an immune response specific for a P. acnes
CC   polypeptide and an isolated T cell population comprising T cells prepared
CC   via this method; a vaccine composition (comprising P. acnes polypeptides,
CC   polynucleotides, antibodies, fusion proteins, T cell populations, or
CC   antigen-presenting cells that express the polypeptide); a method and kit
CC   for detecting or determining the presence or absence of P. acnes in a
CC   patient; and a method for inhibiting the development of P. acnes in a
CC   patient. The P. acnes polypeptides, polynucleotides, antibodies, fusion
CC   proteins, T cell populations or antigen-presenting cells that express the
CC   polypeptides are useful for diagnosing, preventing or treating acne
CC   vulgaris, or for stimulating an immune response specific for a P. acnes
CC   protein. The polynucleotides can also be used as probes or primers for
CC   nucleic acid hybridisation. The vaccine composition is useful for the
CC   stimulation of an immune response against P. acnes, or for treating acne,
CC   and the kit is useful for performing a diagnostic assay. The present
CC   sequence represents a polypeptide predicted to be encoded by an ORF (open
CC   reading frame) contained within the P. acnes polynucleotides of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 55 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 55;
  Best Local Similarity   50.0%;  Pred. No. 9.5e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         10 TQRVVRHI 17


RESULT 24
ABB03789
ID   ABB03789 standard; protein; 56 AA.
XX
AC   ABB03789;
XX
DT   08-JAN-2002  (first entry)
XX
DE   Human musculoskeletal system related polypeptide SEQ ID NO 1736.
XX
KW   Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW   antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW   vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW   cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW   neurological disease; infection; human; secreted protein;
KW   musculoskeletal system.
XX
OS   Homo sapiens.
XX
PN   WO200155367-A1.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001338.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
PR   14-SEP-2000; 2000US-0232397P.
PR   14-SEP-2000; 2000US-0232398P.
PR   14-SEP-2000; 2000US-0232399P.
PR   14-SEP-2000; 2000US-0232400P.
PR   14-SEP-2000; 2000US-0232401P.
PR   14-SEP-2000; 2000US-0233063P.
PR   14-SEP-2000; 2000US-0233064P.
PR   14-SEP-2000; 2000US-0233065P.
PR   21-SEP-2000; 2000US-0234223P.
PR   21-SEP-2000; 2000US-0234274P.
PR   25-SEP-2000; 2000US-0234997P.
PR   25-SEP-2000; 2000US-0234998P.
PR   26-SEP-2000; 2000US-0235484P.
PR   27-SEP-2000; 2000US-0235834P.
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PR   27-SEP-2000; 2000US-0235836P.
PR   29-SEP-2000; 2000US-0236327P.
PR   29-SEP-2000; 2000US-0236367P.
PR   29-SEP-2000; 2000US-0236368P.
PR   29-SEP-2000; 2000US-0236369P.
PR   29-SEP-2000; 2000US-0236370P.
PR   02-OCT-2000; 2000US-0236802P.
PR   02-OCT-2000; 2000US-0237037P.
PR   02-OCT-2000; 2000US-0237038P.
PR   02-OCT-2000; 2000US-0237039P.
PR   02-OCT-2000; 2000US-0237040P.
PR   13-OCT-2000; 2000US-0239935P.
PR   13-OCT-2000; 2000US-0239937P.
PR   20-OCT-2000; 2000US-0240960P.
PR   20-OCT-2000; 2000US-0241221P.
PR   20-OCT-2000; 2000US-0241785P.
PR   20-OCT-2000; 2000US-0241786P.
PR   20-OCT-2000; 2000US-0241787P.
PR   20-OCT-2000; 2000US-0241808P.
PR   20-OCT-2000; 2000US-0241809P.
PR   20-OCT-2000; 2000US-0241826P.
PR   01-NOV-2000; 2000US-0244617P.
PR   08-NOV-2000; 2000US-0246474P.
PR   08-NOV-2000; 2000US-0246475P.
PR   08-NOV-2000; 2000US-0246476P.
PR   08-NOV-2000; 2000US-0246477P.
PR   08-NOV-2000; 2000US-0246478P.
PR   08-NOV-2000; 2000US-0246523P.
PR   08-NOV-2000; 2000US-0246524P.
PR   08-NOV-2000; 2000US-0246525P.
PR   08-NOV-2000; 2000US-0246526P.
PR   08-NOV-2000; 2000US-0246527P.
PR   08-NOV-2000; 2000US-0246528P.
PR   08-NOV-2000; 2000US-0246532P.
PR   08-NOV-2000; 2000US-0246609P.
PR   08-NOV-2000; 2000US-0246610P.
PR   08-NOV-2000; 2000US-0246611P.
PR   08-NOV-2000; 2000US-0246613P.
PR   17-NOV-2000; 2000US-0249207P.
PR   17-NOV-2000; 2000US-0249208P.
PR   17-NOV-2000; 2000US-0249209P.
PR   17-NOV-2000; 2000US-0249210P.
PR   17-NOV-2000; 2000US-0249211P.
PR   17-NOV-2000; 2000US-0249212P.
PR   17-NOV-2000; 2000US-0249213P.
PR   17-NOV-2000; 2000US-0249214P.
PR   17-NOV-2000; 2000US-0249215P.
PR   17-NOV-2000; 2000US-0249216P.
PR   17-NOV-2000; 2000US-0249217P.
PR   17-NOV-2000; 2000US-0249218P.
PR   17-NOV-2000; 2000US-0249244P.
PR   17-NOV-2000; 2000US-0249245P.
PR   17-NOV-2000; 2000US-0249264P.
PR   17-NOV-2000; 2000US-0249265P.
PR   17-NOV-2000; 2000US-0249297P.
PR   17-NOV-2000; 2000US-0249299P.
PR   17-NOV-2000; 2000US-0249300P.
PR   01-DEC-2000; 2000US-0250160P.
PR   01-DEC-2000; 2000US-0250391P.
PR   05-DEC-2000; 2000US-0251030P.
PR   05-DEC-2000; 2000US-0251988P.
PR   05-DEC-2000; 2000US-0256719P.
PR   06-DEC-2000; 2000US-0251479P.
PR   08-DEC-2000; 2000US-0251856P.
PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
PR   08-DEC-2000; 2000US-0251989P.
PR   08-DEC-2000; 2000US-0251990P.
PR   11-DEC-2000; 2000US-0254097P.
PR   05-JAN-2001; 2001US-0259678P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Barash SC,  Ruben SM;
XX
DR   WPI; 2001-451937/48.
DR   N-PSDB; AAL35371.
XX
PT   Isolated polypeptide for treating, preventing and/ or prognosing
PT   disorders related to the musculoskeletal system including musculoskeletal
PT   cancers and also for testing and detection e.g. diagnosis.
XX
PS   Claim 11; SEQ ID NO 1736; 781pp + Sequence Listing; English.
XX
CC   The invention relates to novel genes (AAL34669-AAL37666) and proteins
CC   (ABB03087-ABB04109) associated with the musculoskeletal system useful for
CC   preventing, treating or ameliorating medical conditions e.g. by protein
CC   or gene therapy. The genes are isolated from a range of human tissues
CC   disclosed in the specification. The nucleic acids, proteins, antibodies
CC   and (ant)agonists are useful in the diagnosis, treatment and prevention
CC   of: (a) cancer, e.g. breast and ovarian cancer and other cancers of the
CC   adrenal gland, bone, bone marrow, breast, gastrointestinal tract, liver,
CC   lung, or urogenital; (b) immune disorders e.g. Addison's disease,
CC   allergies, autoimmune haemolytic anaemia, autoimmune thyroiditis,
CC   diabetes mellitus, Crohn's disease, multiple sclerosis, rheumatoid
CC   arthritis and ulcerative colitis; (c) cardiovascular disorders such as
CC   myocardial ischaemias; (d) wound healing; (e) neurological diseases e.g.
CC   cerebral anoxia and epilepsy; and (f) infectious diseases such as viral,
CC   bacterial, fungal and parasitic infections. Note: The sequence data for
CC   this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 56 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 56;
  Best Local Similarity    50.0%;  Pred. No. 9.7e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         25 MQIVVGHI 32


RESULT 25
ABU13083
ID   ABU13083 standard; protein; 56 AA.
XX
AC   ABU13083;
XX
DT   26-FEB-2003  (first entry)
XX
DE   Novel human musculoskeletal system antigen #703.
XX
KW   Musculoskeletal system antigen; cancer; metastasis; re-vascularisation;
KW   thrombosis; arteriosclerosis; mineral content; cardiovascular condition;
KW   wound; injury; burn; angiogenesis; ulcer; post-operative tissue repair;
KW   limb regeneration; neuronal growth; neurodegenerative disorder;
KW   Alzheimer's disease; Parkinson's disease; AIDS-related complex;
KW   chondrocyte growth; bone regeneration; periodontal regeneration;
KW   tissue transport; bone graft; skin aging; keratinocyte growth; hair loss;
KW   melanocyte growth; cell proliferation; cell growth; organ transplant;
KW   cell differentiation; body height; weight; hair colour; eye colour; skin;
KW   percentage of adipose tissue; pigmentation; cosmetic surgery; metabolism;
KW   biorhythm; caricadic rhythm; depression; tendency for violence; pain;
KW   reproductive capability; hormone level; endocrine level; appetite;
KW   libido; memory; stress; storage capability; fat content; lipid content;
KW   protein content; carbohydrate content; vitamin content; cofactor content;
KW   nutritional component.
XX
OS   Homo sapiens.
XX
PN   US2002147140-A1.
XX
PD   10-OCT-2002.
XX
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PF   17-JAN-2001; 2001US-00764877.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   28-JUN-2000; 2000US-0214886P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   22-AUG-2000; 2000US-0226868P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   08-SEP-2000; 2000US-0231413P.
PR   21-SEP-2000; 2000US-0234223P.
PR   21-SEP-2000; 2000US-0234274P.
PR   25-SEP-2000; 2000US-0234997P.
PR   27-SEP-2000; 2000US-0235834P.
PR   29-SEP-2000; 2000US-0236327P.
PR   29-SEP-2000; 2000US-0236367P.
PR   29-SEP-2000; 2000US-0236368P.
PR   29-SEP-2000; 2000US-0236369P.
PR   29-SEP-2000; 2000US-0236370P.
PR   02-OCT-2000; 2000US-0236802P.
PR   02-OCT-2000; 2000US-0237037P.
PR   02-OCT-2000; 2000US-0237038P.
PR   02-OCT-2000; 2000US-0237039P.
PR   02-OCT-2000; 2000US-0237040P.
PR   13-OCT-2000; 2000US-0239935P.
PR   20-OCT-2000; 2000US-0240960P.
PR   20-OCT-2000; 2000US-0241785P.
PR   20-OCT-2000; 2000US-0241809P.
PR   01-NOV-2000; 2000US-0244617P.
PR   17-NOV-2000; 2000US-0249299P.
PR   08-DEC-2000; 2000US-0251856P.
PR   08-DEC-2000; 2000US-0251868P.
PR   08-DEC-2000; 2000US-0251869P.
XX
PA   (ROSE/) ROSEN C A.
PA   (RUBE/) RUBEN S M.
PA   (BARA/) BARASH S C.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2003-128199/12.
DR   N-PSDB; ABX58359.
XX
PT   Isolated nucleic acid molecules encoding musculoskeletal system
PT   associated polypeptides, useful for detecting disorders, e.g. cancer.
XX
PS   Claim 11; SEQ ID NO 1736; 321pp; English.
XX
CC   The invention describes an isolated nucleic acid molecule comprising a
CC   sequence encoding musculoskeletal system associated polypeptides useful
CC   for detecting disorders, e.g., cancer or cancer metastases, in animals or
CC   humans. The nucleic acid: stimulates re-vascularisation of ischaemic
CC   tissues associated with conditions such as thrombosis, arteriosclerosis,
CC   and other cardiovascular conditions; treats wounds due to injuries,
CC   burns, post-operative tissue repair, and ulcers; stimulates angiogenesis
CC   and limb regeneration; stimulates neuronal growth; can treat and prevent
CC   neuronal damage occurring in certain disorders or neurodegenerative
CC   conditions, such as, Alzheimer's disease, Parkinson's disease, and AIDS-
CC   related complex; stimulates chondrocyte growth, thus they can be used to
CC   enhance bone and periodontal regeneration and aid in tissue transports or
CC   bone grafts; prevents skin aging due to sunburn by stimulating
CC   keratinocyte growth; prevents hair loss, since FGF family members
CC   activate hair-forming cells and promotes melanocyte growth; stimulates
CC   growth and differentiation of hematopoietic cells and bone marrow cells
CC   when used in combination with other cytokines; maintains organs before
CC   transplantation or for supporting cell culture of primary tissues;
CC   induces tissue of mesodermal origin to differentiate in early embryos;
CC   increases or decreases the differentiation or proliferation of embryonic
CC   stem cells, besides, haematopoietic lineage; modulates mammalian
CC   characteristics, such as, body height, weight, hair colour, eye colour,
CC   skin, percentage of adipose tissue, pigmentation, size, and shape (e.g.,
CC   cosmetic surgery); modulates mammalian metabolism; changes mammal's metal
CC   state or physical state by influencing biorhythms, caricadic rhythms,
CC   depression, tendency for violence, tolerance for pain, reproductive
CC   capabilities, hormonal or endocrine levels, appetite, libido, memory, or
CC   stress; increases or decreases storage capabilities, fat content, lipid,
CC   protein, carbohydrate, vitamins, minerals, cofactors or other nutritional
CC   components. This is the amino acid sequence of a novel human
CC   musculoskeletal system antigen. Note: The sequence data for this patent
CC   did not form part of the printed specification, but was obtained in
CC   electronic format directly from the US patent office at
CC   ftp.seqdata.uspto.gov/sequence.html?DocID=20020147140
XX
SQ   Sequence 56 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 56;
  Best Local Similarity   50.0%;  Pred. No. 9.7e+02;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         25 MQIVVGHI 32


RESULT 26
ABP75845
ID   ABP75845 standard; protein; 60 AA.
XX
AC   ABP75845;
XX
DT   10-FEB-2003  (first entry)
XX
DE   Human secretory polypeptide SPTM SEQ ID NO 1029.
XX
KW   Human; SPTM; autoimmune disorder; inflammatory disorder; AIDS; anaemia;
KW   asthma; Crohn's disease; neurological disorder; epilepsy; cancer;
KW   Huntington's disease; Alzheimer's disease; Creutzfeldt-Jakob disease;
KW   multiple sclerosis; Parkinson's disease; cell proliferative disorder;
KW   anti-inflammatory; immunosuppressive; neuroprotective; nootropic;
KW   neuroleptic; anticonvulsant; cytostatic; antiparkinsonian; anxiolytic;
KW   antipsoriatic; antianaemic; anti-HIV; human immunodeficiency virus;
KW   secretory polynucleotide; secretory protein.
XX
OS   Homo sapiens.
XX
PN   WO200283876-A2.
XX
PD   24-OCT-2002.
XX
PF   27-MAR-2002; 2002WO-US009921.
XX
PR   29-MAR-2001; 2001US-0280067P.
PR   29-MAR-2001; 2001US-0280068P.
PR   16-MAY-2001; 2001US-0291280P.
PR   17-MAY-2001; 2001US-0291829P.
PR   17-MAY-2001; 2001US-0291849P.
PR   19-JUN-2001; 2001US-0299428P.
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PR   20-JUN-2001; 2001US-0299776P.
PR   20-JUN-2001; 2001US-0300001P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Daffo A, Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J;
PI   Dufour GE, Hillman JL, Yu JY, Tuason O, Yap PE, Amshey SR;
PI   Daughtery SC, Dam TC, Liu TF, Nguyen DA, Kleefeld Y, Gerstin EH;
PI   Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B;
PI   Flores V, Marwaha R, Lo A, Lan RY, Urashka ME;
XX
DR   WPI; 2003-075543/07.
DR   N-PSDB; ABZ36287.
XX
PT   New human secretory proteins and polynucleotides, useful for diagnosing,
PT   treating or preventing autoimmune/inflammatory disorders (e.g. AIDS),
PT   neurological disorders (e.g. Alzheimer's), or cell proliferations or
PT   cancers.
XX
PS   Claim 27; SEQ ID NO 1029; 458pp + Sequence Listing; English.
XX
CC   The invention relates to a secretory polynucleotide (designated sptm)
CC   comprising any of 567 polynucleotide sequences (ABZ35837-ABZ36403), a
CC   naturally occurring polynucleotide sequence at least 90 % identical to
CC   the polynucleotide sequence, a polynucleotide complementary to them or an
CC   RNA equivalent of them. The polypeptide or polynucleotide are useful for
CC   treating, preventing or diagnosing a disease or condition associated with
CC   the expression of functional SPTM. These are particularly useful for
CC   diagnosing, treating or preventing autoimmune/inflammatory disorders
CC   (e.g. acquired immunodeficiency syndrome, anaemia, asthma or Crohn's
CC   disease), neurological disorders (e.g. epilepsy, Huntington's disease,
CC   dementia, stroke, Alzheimer's disease, Creutzfeldt-Jakob disease,
CC   multiple sclerosis, cerebral palsy, Parkinson's disease, anxiety,
CC   schizophrenia or amnesia), or cell proliferative disorders (e.g.
CC   psoriasis, polycythemia vera, or cancers including adenocarcinoma,
CC   leukaemia, lymphoma, melanoma, myeloma, sarcoma or cancers of the brain,
CC   breast, cervix or prostate). The present sequence is one of the SPTM
CC   proteins of the invention (ABP75384-ABP75962). Note: The sequence data
CC   for this patent did not form part of the printed specfication, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 60 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 60;
  Best Local Similarity   50.0%;  Pred. No. 1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         22 IQFYVVHI 29


RESULT 27
AAY11419
ID   AAY11419 standard; protein; 64 AA.
XX
AC   AAY11419;
XX
DT   21-JUN-1999  (first entry)
XX
DE   Human 5' EST secreted protein SEQ ID No 241.
XX
KW   Human; secreted protein; EST; expressed sequence tag; diagnosis;
KW   forensic; gene therapy; chromosome mapping; signal peptide;
KW   upstream regulatory sequence; cytokine activity; cell proliferation;
KW   differentiation; haematopoiesis regulation; tissue growth regulation;
KW   reproductive hormone regulation; chemotactic; chemokinetic; haemostatic;
KW   thrombolytic; anti-inflammatory; tumour inhibition.
XX
OS   Homo sapiens.
XX
PN   WO9906551-A2.
XX
PD   11-FEB-1999.
XX
PF   31-JUL-1998;   98WO-IB001235.
XX
PR   01-AUG-1997;   97US-00905133.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J, Duclert A, Lacroix B;
XX
DR   WPI; 1999-153781/13.
DR   N-PSDB; AAX39485.
XX
PT   New nucleic acids encoding human secreted - proteins obtained from cDNA
PT   libraries prepared from substantia nigra, cerebellum, surrenals and fetal
PT   brain tissue.
XX
PS   Claim 34; Page 364; 434pp; English.
XX
CC   AAX39440 to AAX39597 represent 5' expressed sequence tags (ESTs) for
CC   human secreted proteins, and encode the proteins given in AAY11374 to
CC   AAY11531, respectively. The proteins given represent the signal peptide
CC   and an N-terminal fragment of a secreted protein. The nucleic acid
CC   sequences can be used for producing secreted human gene products. They
CC   can also be used to develop products for diagnosis and therapy. The
CC   proteins obtained may have cytokine activity, cell
CC   proliferation/differentiation activity, haematopoiesis regulating
CC   activity, tissue growth regulating activity, reproductive hormone
CC   regulating activity, chemotactic/ chemokinetic activity, haemostatic and
CC   thrombolytic activity, receptor/ ligand activity, anti-inflammatory
CC   activity, tumour inhibition activity or other activities. The products
CC   can be used in forensic, gene therapy and chromosome mapping procedures.
CC   The sequences can also be used for obtaining corresponding promoter
CC   sequences. The nucleic acids encoding the signal peptide can be used for
CC   directing extracellular secretion of a polypeptide or the insertion of a
CC   polypeptide into a membrane, or importing a polypeptide into a cell
XX
SQ   Sequence 64 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 64;
  Best Local Similarity   50.0%;  Pred. No. 1.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         25 MQIYVLHI 32


RESULT 28
AAG74878
ID   AAG74878 standard; protein; 65 AA.
XX
AC   AAG74878;
XX
DT   03-SEP-2001  (first entry)
XX
DE   Human colon cancer antigen protein SEQ ID NO:5642.
XX
KW   Human; colon cancer; colon cancer antigen; diagnosis; detection;
KW   colorectal carcinoma.
XX
OS   Homo sapiens.
XX
PN   WO200122920-A2.
XX
PD   05-APR-2001.
XX
PF   28-SEP-2000; 2000WO-US026524.
XX
PR   29-SEP-1999;   99US-0157137P.
PR   03-NOV-1999;   99US-0163280P.
XX
```

PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Ruben SM, Barash SC, Birse CE, Rosen CA;
XX
DR WPI; 2001-235357/24.
DR N-PSDB; AAH34283.
XX
PT Nucleic acids encoding 4277 human colon cancer-associated polypeptides,
PT useful for preventing, diagnosing and/or treating colorectal cancers.
XX
PS Claim 11; Page 7193; 9803pp; English.
XX
CC AAH32943 to AAH37195 and AAG73514 to AAG77788 represent human colon
CC cancer-associated nucleic acid molecules (N) and proteins (P), where the
CC proteins are collectively known as colon cancer antigens. The colon
CC cancer antigens have cytostatic activity and can be used in gene therapy
CC and vaccine production. N and P may be used in the prevention, diagnosis
CC and treatment of diseases associated with inappropriate P expression. For
CC example, N and P may be used to treat disorders associated with decreased
CC expression by rectifying mutations or deletions in a patient's genome
CC that affect the activity of P by expressing inactive proteins or to
CC supplement the patients own production of P. Additionally, N may be used
CC to produce the colon cancer-associated Ps, by inserting the nucleic acids
CC into a host cell and culturing the cell to express the proteins. N and P
CC can be used in the prevention, diagnosis and treatment of colorectal
CC carcinomas and cancers. AAH37196 to AAH37204 and AAB77789 represent
CC sequences used in the exemplification of the present invention. N.B.
CC Pages 666 to 682 and page 7053 of the sequence listing were missing at
CC time of publication, meaning no sequences are present for SEQ ID NO:1027
CC to 1052, 7921 and 7922
XX
SQ Sequence 65 AA;

Query Match 100.0%; Score 25; DB 4; Length 65;
Best Local Similarity 50.0%; Pred. No. 1.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 7 SQSLVNHI 14

RESULT 29
ABP63801
ID ABP63801 standard; protein; 65 AA.
XX
AC ABP63801;
XX
DT 04-NOV-2002 (first entry)
XX
DE Human ORF171.
XX
KW Cytostatic; Cardiant; Anti-allergic; Immunosuppressive; Vulnerary;
KW Antiinflammatory; gene therapy; human; ORFX; atherogenic; platelet;
KW human umbilical vein endothelial cell; HUVEC; atherosclerotic plaque;
KW cancer; cardiovascular disease; allergy; autoimmune disease;
KW wound healing; blood coagulation disorder; inflammatory disorder.
XX
OS Homo sapiens.
XX
PN US2002082206-A1.
XX
PD 27-JUN-2002.
XX
PF 30-MAY-2001; 2001US-00867550.
XX
PR 30-MAY-2000; 2000US-0208427P.
XX
PA (LEAC/) LEACH M D.
PA (MEHR/) MEHRABAN F.
PA (CONL/) CONLEY P B.
PA (TOPP/) TOPPER J N.
PA (LAWD/) LAW D.
XX
PI Leach MD, Mehraban F, Conley PB, Topper JN, Law D;
XX
DR WPI; 2002-626554/67.
DR N-PSDB; ABQ98364.
XX
PT New polypeptide designated ORFX are present in human atherogenic cells
PT and are useful to prevent and treat ORFX-associated disorders including
PT cancer, allergy, wound healing or autoimmune, cardiovascular or
PT inflammatory disease.
XX
PS Claim 10; SEQ ID NO 342; 78pp; English.
XX
CC The present invention relates to novel human ORFX polypeptides and their
CC coding sequences (ABP63631-ABP64681 and ABQ98194-ABQ99267). The sequences
CC were discovered in human atherogenic cells, in particular in platelets
CC and human umbilical vein endothelial cells (HUVEC) and are expressed in
CC many other tissues as well. Atherogenic cells are cells which have the
CC potential to develop atherosclerotic plaques. The ORFX polypeptides and
CC nucleic acids are useful for treating or preventing a pathological
CC condition associated with an ORFX-associated disorder, e.g. cancer,
CC cardiovascular disease, allergy, autoimmune disease, wound healing, blood
CC coagulation disorders or inflammatory disorders. Note: The sequence data
CC for this patent did not form part of the printed specification, but was
CC obtained in electronic format directly from the USPTO web site at
CC seqdata.uspto.gov/sequence.html?DocID=20020082206
XX
SQ Sequence 65 AA;

Query Match 100.0%; Score 25; DB 5; Length 65;
Best Local Similarity 50.0%; Pred. No. 1.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 56 KQKEVGHI 63

RESULT 30
AAG64900
ID AAG64900 standard; protein; 81 AA.
XX
AC AAG64900;
XX
DT 15-OCT-2001 (first entry)
XX
DE Human kinesin 9.
XX
KW Human; kinesin 9; cancer; haemopathy; HIV infection; inflammation;
KW immunological disease; gene therapy.
XX
OS Homo sapiens.
XX
PN WO200155383-A1.
XX
PD 02-AUG-2001.
XX
PF 21-JAN-2001; 2001WO-CN000090.
XX
PR 28-JAN-2000; 2000CN-00111618.
XX
PA (BIOD-) BIODOOR GENE TECHNOLOGY LTD SHANGHAI.
XX
PI Mao Y, Xie Y;
XX
DR WPI; 2001-483249/52.
DR N-PSDB; AAH48320.
XX
PT Human kinesin 9 and encoded polynucleotide, applicable in diagnosis and
PT treatment of malignant tumor, hemopathy, HIV infection, immunological
PT diseases and various inflammations.
XX
PS Claim 1; Page 25; 29pp; Chinese.

```
XX
CC   The present invention provides the protein and coding sequences of human
CC   kinesin 9. The sequences are useful in the treatment of cancer,
CC   haemopathy, HIV infection, immunological diseases and inflammation. The
CC   present sequence is the protein of the invention
XX
SQ   Sequence 81 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 81;
  Best Local Similarity   50.0%;  Pred. No. 1.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         67 CQSSVDHI 74


RESULT 31
AAU27930
ID   AAU27930 standard; protein; 87 AA.
XX
AC   AAU27930;
XX
DT   18-DEC-2001  (first entry)
XX
DE   Human contig polypeptide sequence #83.
XX
KW   Mammal; human; rhesus monkey; baker's yeast; fission yeast; Norway rat;
KW   mouse; Chinese hamster; African clawed frog; fruit fly; dog; leukaemia;
KW   cancer; lymphoma; neuroblastoma; autoimmune disorder; cell proliferation;
KW   nervous system disorder; inflammatory disorder; cell differentiation;
KW   angiogenesis; stem cell growth factor; activin; inhibin; cartilage; burn;
KW   genetic disorder; bone regeneration; tendon; ligament; tissue repair;
KW   cytostatic; antirheumatic; antiarthritic; vulnerary; antiinflammatory;
KW   antibacterial; immunosuppressive; vasotropic; antiparkinsonian;
KW   neuroprotective; osteopathic; antidiabetic; antiasthmatic; antiallergic;
KW   immunostimulant; analgesic; gene therapy.
XX
OS   Homo sapiens.
OS   Synthetic.
XX
PN   WO200164834-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US004926.
XX
PR   28-FEB-2000; 2000US-00515126.
PR   18-MAY-2000; 2000US-00577409.
PR   17-JUN-2000; 2000US-00597707.
PR   14-JUL-2000; 2000US-00616807.
PR   19-SEP-2000; 2000US-00664641.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Zhou P,  Asundi V,  Zhang J,  Zhao QA,  Ren F;
PI   Xue AJ,  Yang Y,  Wehrman T,  Wang J,  Ma Y,  Wang D,  Chen R,  Xu C;
PI   Drmanac R;
XX
DR   WPI; 2001-589862/66.
DR   N-PSDB; AAS44830.
XX
PT   Novel polypeptides and nucleic acids obtained from cDNA libraries
PT   prepared from various human tissues, for diagnosis, treatment of cancer,
PT   neurological, inflammatory disorders and for use in arrays for detection.
XX
PS   Claim 10; Page 134; 153pp; English.
XX
CC   Sequences AAU27676-AAU28019 represent full-length polypeptides and contig
CC   polypeptides of the invention. The proteins and their associated DNA
CC   sequences are useful for the treatment, diagnosis and prevention of
CC   various types of disorder in a mammalian subject such as a human, dog,
CC   monkey, mouse, hamster or rat. The disorders include cancers such as
CC   leukaemia, lymphoma and neuroblastoma, autoimmune disorders such as
CC   multiple sclerosis, connective tissue disease, rheumatoid arthritis,
CC   diabetes mellitus, allergic rhinitis, asthma and eczema, nervous system
CC   disorders such as Parkinson's disease, Alzheimer's disease, Huntington's
CC   chorea, amyotrophic lateral sclerosis, spinal muscular atrophy and
CC   Wernicke disease, inflammatory disorders such as nephritis, Crohn's
CC   disease, ischaemia-reperfusion injury, shock, sepsis and inflammatory
CC   bowel disease. The sequences exhibit activity relating to angiogenesis,
CC   cell proliferation, cell differentiation, stem cell growth factor,
CC   activin or inhibin. Therefore, they can be used to manipulate stem cells
CC   in culture to give rise to neuroepithelial cells that can be used to
CC   augment or replace cells damaged by illness, accidental damage or genetic
CC   disorders. The sequences may also be used for regeneration of bone,
CC   cartilage, tendons and ligaments and in tissue repair and burn healing.
CC   Note: Some sequences for this patent did not form part of the printed
CC   specification, but were obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 87 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 87;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         12 TQVPVVHI 19


RESULT 32
AAU19327
ID   AAU19327 standard; protein; 87 AA.
XX
AC   AAU19327;
XX
DT   04-DEC-2001  (first entry)
XX
DE   Human G protein-coupled receptor nGPCR-2253.
XX
KW   Human; G protein-coupled receptor; nGPCR-x; antiviral; analgesic;
KW   cytostatic; cardiant; antidiabetic; anoretic; hypotensive; hypertensive;
KW   antiparkinsonian; nootropic; neuroprotective; antidepressant;
KW   viral infection; HIV-1; human immunodeficiency virus; HIV-2; pain;
KW   cancer; metabolic disease; cardiovascular disease; type 2 diabetes;
KW   obesity; anorexia; hypotension; hypertension; myocardial infarction;
KW   atherosclerosis; Parkinson's disease; psychosis; neurological disorder;
KW   schizophrenia; migraine; major depression; anxiety; mental disorder;
KW   manic depression; dyskinesia; Huntington's disease; Tourette's Syndrome.
XX
OS   Homo sapiens.
XX
PN   WO200166751-A2.
XX
PD   13-SEP-2001.
XX
PF   08-MAR-2001; 2001WO-US007370.
XX
PR   08-MAR-2000; 2000US-0187583P.
PR   08-MAR-2000; 2000US-0187584P.
PR   08-MAR-2000; 2000US-0187637P.
PR   08-MAR-2000; 2000US-0187639P.
PR   08-MAR-2000; 2000US-0187640P.
PR   08-MAR-2000; 2000US-0187707P.
PR   08-MAR-2000; 2000US-0187708P.
PR   08-MAR-2000; 2000US-0187709P.
PR   08-MAR-2000; 2000US-0187827P.
PR   08-MAR-2000; 2000US-0188290P.
PR   08-MAR-2000; 2000US-0188292P.
PR   08-MAR-2000; 2000US-0188293P.
XX
PA   (PHAA ) PHARMACIA & UPJOHN CO.
XX
PI   Vogeli G;
```

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XX
DR   WPI; 2001-536779/59.
DR   N-PSDB; AAS30899.
XX
PT   Isolated nucleic acid molecules encoding G protein-coupled receptors
PT   termed nGPCR-x, useful in the treatment and diagnosis of viral
PT   infections, cancers and mental disorders (e.g. Parkinson's disease and
PT   schizophrenia).
XX
PS   Claim 31; Page 238; 292pp; English.
XX
CC   The invention relates to novel isolated nucleic acid molecules encoding G
CC   protein-coupled receptors termed nGPCR-x. nGPCR-x polynucleotides,
CC   polypeptides, and modulators may be used in the treatment of diseases and
CC   conditions such as infections, such as viral infections caused by HIV-1
CC   (human immunodeficiency virus) or HIV-2, pain, cancers, metabolic and
CC   cardiovascular diseases and disorders (e.g., type 2 diabetes, obesity,
CC   anorexia, hypotension, hypertension, myocardial infarction,
CC   atherosclerosis), Parkinson's disease, and psychotic and neurological
CC   disorders, including schizophrenia, migraine, major depression, anxiety,
CC   mental disorder, manic depression, and dyskinesias, such as Huntington's
CC   disease or Tourette's Syndrome and many other diseases and syndromes
CC   listed in the specification. nGPCR-x polynucleotides and polypeptides, as
CC   well as nGPCR-x modulators, may also be used in diagnostic assays for
CC   such diseases or conditions. The present sequence represents a G protein-
CC   coupled receptor of the invention
XX
SQ   Sequence 87 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 87;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         21 SQEHVPHI 28


RESULT 33
AAB92655
ID   AAB92655 standard; protein; 88 AA.
XX
AC   AAB92655;
XX
DT   26-JUN-2001  (first entry)
XX
DE   Human protein sequence SEQ ID NO:10999.
XX
KW   Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX
OS   Homo sapiens.
XX
PN   EP1074617-A2.
XX
PD   07-FEB-2001.
XX
PF   28-JUL-2000; 2000EP-00116126.
XX
PR   29-JUL-1999;   99JP-00248036.
PR   27-AUG-1999;   99JP-00300253.
PR   11-JAN-2000; 2000JP-00118776.
PR   02-MAY-2000; 2000JP-00183767.
PR   09-JUN-2000; 2000JP-00241899.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Isogai T,  Nishikawa T,  Hayashi K,  Saito K,  Yamamoto J;
PI   Ishii S,  Sugiyama T,  Wakamatsu A,  Nagai K,  Otsuki T;
XX
DR   WPI; 2001-318749/34.
XX
PT   Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT   length cDNAs defined in the specification, and for the detection and/or
PT   diagnosis of the abnormality of the proteins encoded by the full-length
PT   cDNAs.
XX
PS   Claim 8; SEQ ID NO 10999; 2537pp + Sequence Listing; English.
XX
CC   The present invention describes primer sets for synthesising 5602 full-
CC   length cDNAs defined in the specification. Where a primer set comprises:
CC   (a) an oligo-dT primer and an oligonucleotide complementary to the
CC   complementary strand of a polynucleotide which comprises one of the 5602
CC   nucleotide sequences defined in the specification, where the
CC   oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC   of an oligonucleotide comprising a sequence complementary to the
CC   complementary strand of a polynucleotide which comprises a 5'-end
CC   sequence and an oligonucleotide comprising a sequence complementary to a
CC   polynucleotide which comprises a 3'-end sequence, where the
CC   oligonucleotide comprises at least 15 nucleotides and the combination of
CC   the 5'-end sequence/3'-end sequence is selected from those defined in the
CC   specification. The primer sets can be used in antisense therapy and in
CC   gene therapy. The primers are useful for synthesising polynucleotides,
CC   particularly full-length cDNAs. The primers are also useful for the
CC   detection and/or diagnosis of the abnormality of the proteins encoded by
CC   the full-length cDNAs. The primers allow obtaining of the full-length
CC   cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC   AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC   represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC   oligonucleotides, all of which are used in the exemplification of the
CC   present invention
XX
SQ   Sequence 88 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 88;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         63 SQREVRHI 70


RESULT 34
ABP75406
ID   ABP75406 standard; protein; 88 AA.
XX
AC   ABP75406;
XX
DT   10-FEB-2003  (first entry)
XX
DE   Human secretory polypeptide SPTM SEQ ID NO 590.
XX
KW   Human; SPTM; autoimmune disorder; inflammatory disorder; AIDS; anaemia;
KW   asthma; Crohn's disease; neurological disorder; epilepsy; cancer;
KW   Huntington's disease; Alzheimer's disease; Creutzfeldt-Jakob disease;
KW   multiple sclerosis; Parkinson's disease; cell proliferative disorder;
KW   anti-inflammatory; immunosuppressive; neuroprotective; nootropic;
KW   neuroleptic; anticonvulsant; cytostatic; antiparkinsonian; anxiolytic;
KW   antipsoriatic; antianaemic; anti-HIV; human immunodeficiency virus;
KW   secretory polynucleotide; secretory protein.
XX
OS   Homo sapiens.
XX
PN   WO200283876-A2.
XX
PD   24-OCT-2002.
XX
PF   27-MAR-2002; 2002WO-US009921.
XX
PR   29-MAR-2001; 2001US-0280067P.
PR   29-MAR-2001; 2001US-0280068P.
PR   16-MAY-2001; 2001US-0291280P.
PR   17-MAY-2001; 2001US-0291829P.
PR   17-MAY-2001; 2001US-0291849P.
PR   19-JUN-2001; 2001US-0299428P.
PR   20-JUN-2001; 2001US-0299776P.
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PR   20-JUN-2001; 2001US-0300001P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Daffo A, Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J;
PI   Dufour GE, Hillman JL, Yu JY, Tuason O, Yap PE, Amshey SR;
PI   Daughtery SC, Dam TC, Liu TF, Nguyen DA, Kleefeld Y, Gerstin EH;
PI   Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B;
PI   Flores V, Marwaha R, Lo A, Lan RY, Urashka ME;
XX
DR   WPI; 2003-075543/07.
DR   N-PSDB; ABZ35857.
XX
PT   New human secretory proteins and polynucleotides, useful for diagnosing,
PT   treating or preventing autoimmune/inflammatory disorders (e.g. AIDS),
PT   neurological disorders (e.g. Alzheimer's), or cell proliferations or
PT   cancers.
XX
PS   Claim 27; SEQ ID NO 590; 458pp + Sequence Listing; English.
XX
CC   The invention relates to a secretory polynucleotide (designated sptm)
CC   comprising any of 567 polynucleotide sequences (ABZ35837-ABZ36403), a
CC   naturally occurring polynucleotide sequence at least 90 % identical to
CC   the polynucleotide sequence, a polynucleotide complementary to them or an
CC   RNA equivalent of them. The polypeptide or polynucleotide are useful for
CC   treating, preventing or diagnosing a disease or condition associated with
CC   the expression of functional SPTM. These are particularly useful for
CC   diagnosing, treating or preventing autoimmune/inflammatory disorders
CC   (e.g. acquired immunodeficiency syndrome, anaemia, asthma or Crohn's
CC   disease), neurological disorders (e.g. epilepsy, Huntington's disease,
CC   dementia, stroke, Alzheimer's disease, Creutzfeldt-Jakob disease,
CC   multiple sclerosis, cerebral palsy, Parkinson's disease, anxiety,
CC   schizophrenia or amnesia), or cell proliferative disorders (e.g.
CC   psoriasis, polycythemia vera, or cancers including adenocarcinoma,
CC   leukaemia, lymphoma, melanoma, myeloma, sarcoma or cancers of the brain,
CC   breast, cervix or prostate). The present sequence is one of the SPTM
CC   proteins of the invention (ABP75384-ABP75962). Note: The sequence data
CC   for this patent did not form part of the printed specfication, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 88 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 88;
  Best Local Similarity   50.0%;  Pred. No. 1.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         61 SQGDVLHI 68


RESULT 35
AAM93111
ID   AAM93111 standard; protein; 91 AA.
XX
AC   AAM93111;
XX
DT   05-NOV-2001  (first entry)
XX
DE   Human digestive system antigen SEQ ID NO: 2460.
XX
KW   Human; digestive system antigen; gene therapy; cancer; appendicitis;
KW   ulcerative colitis; infection; Hirschsprung's disease; chronic colitis;
KW   digestive system disorder; Meckel's diverticulum.
XX
OS   Homo sapiens.
XX
PN   WO200155314-A2.
XX
PD   02-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001324.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
PR   14-SEP-2000; 2000US-0232397P.
PR   14-SEP-2000; 2000US-0232398P.
PR   14-SEP-2000; 2000US-0232399P.
PR   14-SEP-2000; 2000US-0232400P.
PR   14-SEP-2000; 2000US-0232401P.
PR   14-SEP-2000; 2000US-0233063P.
PR   14-SEP-2000; 2000US-0233064P.
PR   14-SEP-2000; 2000US-0233065P.
PR   21-SEP-2000; 2000US-0234223P.
PR   21-SEP-2000; 2000US-0234274P.
PR   25-SEP-2000; 2000US-0234997P.
PR   25-SEP-2000; 2000US-0234998P.
PR   26-SEP-2000; 2000US-0235484P.
PR   27-SEP-2000; 2000US-0235834P.
PR   27-SEP-2000; 2000US-0235836P.
PR   29-SEP-2000; 2000US-0236327P.
PR   29-SEP-2000; 2000US-0236367P.
PR   29-SEP-2000; 2000US-0236368P.
PR   29-SEP-2000; 2000US-0236369P.
PR   29-SEP-2000; 2000US-0236370P.
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PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-502630/55.
DR N-PSDB; AAK88884.
XX
PT Polynucleotides encoding digestive system antigens, useful for
PT diagnosing, treating, preventing and/or prognozing disorders of the
PT digestive system, particularly cancer and cancer metastases.
XX
PS Claim 11; SEQ ID NO 2460; 986pp; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of human digestive system antigens. These can be used in the
CC diagnosis, treatment and prevention of digestive system disorders,
CC including cancer, Meckel's diverticulum, bacterial or parasitic
CC infections, appendicitis, Hirschsprung's disease, chronic colitis or
CC ulcerative colitis. The present sequence is a digestive system antigen of
CC the invention
XX
SQ Sequence 91 AA;

```
  Query Match             100.0%;  Score 25;  DB 4;  Length 91;
  Best Local Similarity    50.0%;  Pred. No. 1.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
                :|::|:||
Db         37 VQDTVDHI 44
```

RESULT 36
AAM38627
ID AAM38627 standard; protein; 91 AA.
XX
AC AAM38627;
XX
DT 19-OCT-2001 (first entry)
XX
DE Human colorectal cancer antigen SEQ ID NO: 142.
XX
KW Human; colorectal cancer; colorectal cancer antigen; gene therapy.
XX
OS Homo sapiens.
XX
PN WO200155350-A1.
XX
PD 02-AUG-2001.
XX
PF 17-JAN-2001; 2001WO-US001350.
XX
PR 31-JAN-2000; 2000US-0179065P.
PR 04-FEB-2000; 2000US-0180628P.
PR 24-FEB-2000; 2000US-0184664P.
PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.

PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-457727/49.
DR N-PSDB; AAI57605.
XX
PT Isolated polypeptide for treating, preventing and/ or prognosing
PT disorders related to the colon and rectum including colorectal cancers
PT and also for testing and detection e.g. diagnosis.
XX
PS Claim 11; SEQ ID NO 142; 522pp + Sequence Listing; English.
XX
CC The present invention provides the protein and coding sequences of a
CC number of colorectal cancer antigens. These are shown in AAI57547-
CC AAI57619 and AAM38569-AAM38641. These can be used in the diagnosis,
CC prevention and treatment of cancer of the colon and/or rectum. The
CC present sequence is a colorectal cancer antigen of the invention. Note:
CC The sequence data for this patent did not form part of the printed
CC specification, but was obtained in electronic format directly from WIPO
CC at ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 91 AA;

Query Match 100.0%; Score 25; DB 4; Length 91;
Best Local Similarity 50.0%; Pred. No. 1.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 37 VQDTVDHI 44

RESULT 37
ABG97679
ID ABG97679 standard; protein; 91 AA.
XX
AC ABG97679;

```
XX
DT   18-DEC-2002  (first entry)
XX
DE   Human colorectal cancer related protein #59.
XX
KW   Human; colorectal cancer related protein; colon; rectum;
KW   colorectal cancer metastasis; gastrointestinal disorder; cytostatic.
XX
OS   Homo sapiens.
XX
PN   US2002119919-A1.
XX
PD   29-AUG-2002.
XX
PF   17-JAN-2001; 2001US-00764855.
XX
PR   31-JAN-2000; 2000US-0179065P.
XX
PA   (ROSE/) ROSEN C A.
PA   (RUBE/) RUBEN S M.
PA   (BARA/) BARASH S C.
XX
PI   Rosen CA,  Ruben SM,  Barash SC;
XX
DR   WPI; 2002-731367/79.
DR   N-PSDB; ABS99782.
XX
PT   New colorectal cancer polypeptide for diagnosing, prognosing, preventing,
PT   and treating immune, hyperproliferative, liver, kidney, reproductive
PT   disorders and for identifying modulators of therapeutic use.
XX
PS   Claim 11; SEQ ID NO 142; 183pp; English.
XX
CC   The present invention relates to the isolation of novel human colorectal
CC   cancer related proteins, and polynucleotide sequences encoding them. The
CC   sequences of the invention are useful in the diagnosis, treatment,
CC   prevention and/or prognosis of the colon and/or rectum, including
CC   colorectal cancer, colorectal cancer metastases, and gastrointestinal
CC   disorders such as dysphagia, peptic oesophagitis, gastric reflux,
CC   irritable bowel syndrome, and peritoneal diseases. The invention also
CC   describes antibodies that bind colorectal cancer related proteins,
CC   vectors, host cells, and recombinant and synthetic methods for producing
CC   human colorectal cancer related polynucleotides, polypeptides, and/or
CC   antibodies. ABG97621-ABG97693 represent human colorectal cancer related
CC   proteins. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from the USPTO web site at seqdata.uspto.gov/psipsDIDEntry.html
XX
SQ   Sequence 91 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 91;
  Best Local Similarity   50.0%;  Pred. No. 1.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         37 VQDTVDHI 44


RESULT 38
ADB92935
ID   ADB92935 standard; protein; 91 AA.
XX
AC   ADB92935;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Human colorectal cancer related polypeptide #59.
XX
KW   human; colorectal cancer; antigen; gene therapy;
KW   gastrointestinal disorder; inflammatory disease; infection; cancer;
KW   intestinal neoplasm; small intestine carcinoid tumour;
KW   small intestine non-Hodgkin's lymphoma; small bowel lymphoma; ulcer;
KW   peptic ulcer; Bruton's disease; X linked infantile agammaglobulinaemia;
KW   severe combined immunodeficiency; DiGeorge anomaly;
KW   hyperproliferative disorder; acute lymphoblastic leukaemia;
KW   acute lymphocytic leukaemia; urinary system disorder; cortical necrosis;
KW   kidney infarction; cardiovascular disorder; carcinoid heart disease;
KW   arrhythmia; respiratory disorder; non-allergic rhinitis; sinusitis;
KW   musculoskeletal system disorder; Albers-Schonberg disease;
KW   Marfan's syndrome; neurological disease; phenylketonuria;
KW   Wernicke's encephalopathy; Alzheimer's disease; endocrine disorder;
KW   Grave's disease; Cushing's syndrome; reproductive system disorder;
KW   prostatosis; benign prostatic hypertrophy; benign prostatic hyperplasia;
KW   thrombosis; atherosclerosis; myocardial infarction; ischaemic attack.
XX
OS   Homo sapiens.
XX
PN   US2003054420-A1.
XX
PD   20-MAR-2003.
XX
PF   11-FEB-2002; 2002US-00072349.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
PR   02-MAR-2000; 2000US-0186350P.
PR   16-MAR-2000; 2000US-0189874P.
PR   17-MAR-2000; 2000US-0190076P.
PR   18-APR-2000; 2000US-0198123P.
PR   19-MAY-2000; 2000US-0205515P.
PR   07-JUN-2000; 2000US-0209467P.
PR   28-JUN-2000; 2000US-0214886P.
PR   30-JUN-2000; 2000US-0215135P.
PR   07-JUL-2000; 2000US-0216647P.
PR   07-JUL-2000; 2000US-0216880P.
PR   11-JUL-2000; 2000US-0217487P.
PR   11-JUL-2000; 2000US-0217496P.
PR   14-JUL-2000; 2000US-0218290P.
PR   26-JUL-2000; 2000US-0220963P.
PR   26-JUL-2000; 2000US-0220964P.
PR   14-AUG-2000; 2000US-0224518P.
PR   14-AUG-2000; 2000US-0224519P.
PR   14-AUG-2000; 2000US-0225213P.
PR   14-AUG-2000; 2000US-0225214P.
PR   14-AUG-2000; 2000US-0225266P.
PR   14-AUG-2000; 2000US-0225267P.
PR   14-AUG-2000; 2000US-0225268P.
PR   14-AUG-2000; 2000US-0225270P.
PR   14-AUG-2000; 2000US-0225447P.
PR   14-AUG-2000; 2000US-0225757P.
PR   14-AUG-2000; 2000US-0225758P.
PR   14-AUG-2000; 2000US-0225759P.
PR   18-AUG-2000; 2000US-0226279P.
PR   22-AUG-2000; 2000US-0226681P.
PR   22-AUG-2000; 2000US-0226868P.
PR   22-AUG-2000; 2000US-0227182P.
PR   23-AUG-2000; 2000US-0227009P.
PR   30-AUG-2000; 2000US-0228924P.
PR   01-SEP-2000; 2000US-0229287P.
PR   01-SEP-2000; 2000US-0229343P.
PR   01-SEP-2000; 2000US-0229344P.
PR   01-SEP-2000; 2000US-0229345P.
PR   05-SEP-2000; 2000US-0229509P.
PR   05-SEP-2000; 2000US-0229513P.
PR   06-SEP-2000; 2000US-0230437P.
PR   06-SEP-2000; 2000US-0230438P.
PR   08-SEP-2000; 2000US-0231242P.
PR   08-SEP-2000; 2000US-0231243P.
PR   08-SEP-2000; 2000US-0231244P.
PR   08-SEP-2000; 2000US-0231413P.
PR   08-SEP-2000; 2000US-0231414P.
PR   08-SEP-2000; 2000US-0232080P.
PR   08-SEP-2000; 2000US-0232081P.
PR   12-SEP-2000; 2000US-0231968P.
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PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
PR 17-JAN-2001; 2001US-00764855.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Ruben SM, Barash SC;
XX
DR WPI; 2003-708345/67.
DR N-PSDB; ADB92852.
XX
PT Novel colorectal cancer antigen useful for treating, preventing,
PT diagnosing and/or prognosing gastrointestinal disorders, infections,
PT cancers such as intestinal neoplasms, ulcers.
XX
PS Claim 11; SEQ ID NO 142; 179pp; English.
XX
CC The invention relates to a colorectal cancer antigen. The antigen is
CC useful for chromosome identification, chromosome mapping, radiation
CC hybrid mapping or gene therapy, or as hybridisation probes for
CC differential identification of the tissues or cell types present in a
CC biological sample. The antigen is useful for treating, preventing,
CC diagnosing and/or prognosing gastrointestinal disorders, including
CC inflammatory diseases and/or conditions, infections, cancers (e.g.
CC intestinal neoplasms (carcinoid tumour of the small intestine, non-
CC Hodgkin's lymphoma of the small intestine, small bowel lymphoma)) and
CC ulcers (e.g. peptic ulcers). The antigen and its nucleic acid are useful
CC to provide immunological probes for differential identification of the
CC tissue. The antigen and its nucleic acid are useful for treating,
CC preventing, diagnosing and/or prognosing diseases, disorders and/or
CC conditions of the immune system e.g. Bruton's disease, X linked infantile
CC agammaglobulinaemia, severe combined immunodeficiencies, DiGeorge
CC anomaly, etc. The antigen and its nucleic acid is useful for treating,
CC preventing and/or diagnosing hyperproliferative disorders (e.g. acute

Query Match 100.0%; Score 25; DB 7; Length 91;
Best Local Similarity 50.0%; Pred. No. 1.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 XQXXVXHI 8
              :|::|:||
Db         37 VQDTVDHI 44
```

RESULT 39
ABB55525
ID ABB55525 standard; protein; 92 AA.
XX
AC ABB55525;
XX
DT 29-AUG-2003 (revised)
DT 16-MAY-2002 (first entry)
XX
DE Lactococcus lactis protein yweE.
XX
KW Biosynthesis; biodegradation; lactic bacterium; yogurt; cheese.
XX
OS Lactococcus lactis; IL1403.
XX
PN FR2807446-A1.
XX
PD 12-OCT-2001.
XX
PF 11-APR-2000; 2000FR-00004630.
XX

```
PR   11-APR-2000; 2000FR-00004630.
XX
PA   (INRG ) INRA INST NAT RECH AGRONOMIQUE.
XX
PI   Bolotine A,  Sorokine A,  Renault P,  Ehrlich SD;
XX
DR   WPI; 2002-043418/06.
XX
PT   New nucleotide sequence useful in the identification or Lactococcus
PT   lactis and related species.
XX
PS   Claim 6; SEQ ID NO 2227; 2504pp; French.
XX
CC   The present invention is related to a Lactococcus lactis nucleotide
CC   sequence (ABA90521) and related proteins (ABB53300-ABB55621). The nucleic
CC   acid sequence is useful in the detection and/or amplification of nucleic
CC   acid sequence, particularly to identify Lactococcus lactis or related
CC   species. The proteins of the invention are useful for the biosynthesis or
CC   biodegradation of a composition of interest. The invention helps research
CC   in lactic bacteria, particularly useful in the production of yogurt and
CC   cheese. Note: The sequence data for this patent is based on equivalent
CC   patent WO200177334 (published 18-OCT-2001) which is available in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences. (Updated on 29-AUG-2003 to
CC   standardise OS field)
XX
SQ   Sequence 92 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 92;
  Best Local Similarity   50.0%;  Pred. No. 1.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         23 LQRSVGHI 30


RESULT 40
ABB99244
ID   ABB99244 standard; protein; 94 AA.
XX
AC   ABB99244;
XX
DT   18-DEC-2002  (first entry)
XX
DE   Phosphoribosyl glycinamide synthetase 10.34.
XX
KW   Phosphoribosyl glycinamide synthetase 10.34; malignant tumour;
KW   haemopathy; HIV; immunological disease; inflammation.
XX
OS   Unidentified.
XX
PN   CN1352247-A.
XX
PD   05-JUN-2002.
XX
PF   06-NOV-2000; 2000CN-00127215.
XX
PR   06-NOV-2000; 2000CN-00127215.
XX
PA   (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI   Mao Y,  Xie Y;
XX
DR   WPI; 2002-667812/72.
DR   N-PSDB; ABV72785.
XX
PT   New phosphoribosyl glycinamide synthetase 10.34 polypeptide for treating
PT   malignant tumors, hemopathy, human immunodeficiency virus infection,
PT   immunological diseases and various inflammations.
XX
PS   Claim 1; Page 26 (Disclosure); 30pp; Chinese.
XX
CC   The invention relates to a novel phosphoribosyl glycinamide synthetase
CC   10.34, and the polynucleotides encoding it. The polypeptide is useful in
CC   treating various diseases, such as malignant tumours, haemopathy, human
CC   immunodeficiency virus (HIV) infection, immunological diseases and
CC   various inflammations. The present invention also discloses the
CC   antagonist of the polypeptide, and the application of the polynucleotides
CC   The present sequence represents the phosphoribosyl glycinamide synthetase
CC   10.34 of the invention
XX
SQ   Sequence 94 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 94;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         61 IQILVIHI 68


RESULT 41
AAG34448
ID   AAG34448 standard; protein; 96 AA.
XX
AC   AAG34448;
XX
DT   18-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 41916.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
XX
PF   25-FEB-2000; 2000EP-00301439.
XX
PR   25-FEB-1999;   99US-0121825P.
PR   05-MAR-1999;   99US-0123180P.
PR   09-MAR-1999;   99US-0123548P.
PR   23-MAR-1999;   99US-0125788P.
PR   25-MAR-1999;   99US-0126264P.
PR   29-MAR-1999;   99US-0126785P.
PR   01-APR-1999;   99US-0127462P.
PR   06-APR-1999;   99US-0128234P.
PR   08-APR-1999;   99US-0128714P.
PR   16-APR-1999;   99US-0129845P.
PR   19-APR-1999;   99US-0130077P.
PR   21-APR-1999;   99US-0130449P.
PR   23-APR-1999;   99US-0130510P.
PR   23-APR-1999;   99US-0130891P.
PR   28-APR-1999;   99US-0131449P.
PR   30-APR-1999;   99US-0132048P.
PR   30-APR-1999;   99US-0132407P.
PR   04-MAY-1999;   99US-0132484P.
PR   05-MAY-1999;   99US-0132485P.
PR   06-MAY-1999;   99US-0132486P.
PR   06-MAY-1999;   99US-0132487P.
PR   07-MAY-1999;   99US-0132863P.
PR   11-MAY-1999;   99US-0134256P.
PR   14-MAY-1999;   99US-0134218P.
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PR   14-MAY-1999;   99US-0134221P.
PR   14-MAY-1999;   99US-0134370P.
PR   18-MAY-1999;   99US-0134768P.
PR   19-MAY-1999;   99US-0134941P.
PR   20-MAY-1999;   99US-0135124P.
PR   21-MAY-1999;   99US-0135353P.
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PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
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PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
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PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
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PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
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PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
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PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.
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PR 19-JUL-1999; 99US-0144325P.
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PR 19-JUL-1999; 99US-0144332P.
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PR   28-OCT-1999;   99US-0161993P.
PR   29-OCT-1999;   99US-0162142P.

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  Best Local Similarity   50.0%;  Pred. No. 1.8e+03;
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Qy          1 XQXXVXHI 8
              :|::|:||
Db         54 GQPSVIHI 61


RESULT 42
ABB53633
ID   ABB53633 standard; protein; 96 AA.
XX
AC   ABB53633;
XX
DT   29-AUG-2003  (revised)
DT   16-MAY-2002  (first entry)
XX
DE   Lactococcus lactis protein ydcG.
XX
KW   Biosynthesis; biodegradation; lactic bacterium; yogurt; cheese.
XX
OS   Lactococcus lactis; IL1403.
XX
PN   FR2807446-A1.
XX
PD   12-OCT-2001.
XX
PF   11-APR-2000; 2000FR-00004630.
XX
PR   11-APR-2000; 2000FR-00004630.
XX
PA   (INRG ) INRA INST NAT RECH AGRONOMIQUE.
XX
PI   Bolotine A,  Sorokine A,  Renault P,  Ehrlich SD;
XX
DR   WPI; 2002-043418/06.
XX
PT   New nucleotide sequence useful in the identification or Lactococcus
PT   lactis and related species.
XX
PS   Claim 6; SEQ ID NO 335; 2504pp; French.
XX
CC   The present invention is related to a Lactococcus lactis nucleotide
CC   sequence (ABA90521) and related proteins (ABB53300-ABB55621). The nucleic
CC   acid sequence is useful in the detection and/or amplification of nucleic
CC   acid sequence, particularly to identify Lactococcus lactis or related
CC   species. The proteins of the invention are useful for the biosynthesis or
CC   biodegradation of a composition of interest. The invention helps research
CC   in lactic bacteria, particularly useful in the production of yogurt and
CC   cheese. Note: The sequence data for this patent is based on equivalent
CC   patent WO200177334 (published 18-OCT-2001) which is available in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences. (Updated on 29-AUG-2003 to
CC   standardise OS field)
XX
SQ   Sequence 96 AA;

  Query Match           100.0%;  Score 25;  DB 5;  Length 96;
  Best Local Similarity   50.0%;  Pred. No. 1.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         15 SQEDVAHI 22


RESULT 43
AAG02708
ID   AAG02708 standard; protein; 100 AA.
XX
AC   AAG02708;
XX
DT   06-OCT-2000  (first entry)
XX
DE   Human secreted protein, SEQ ID NO: 6789.
XX
KW   Human; 5' EST; expressed sequence tag; secreted protein; cDNA isolation;
KW   gene therapy; chromosome mapping.
XX
OS   Homo sapiens.
XX
PN   EP1033401-A2.
XX
PD   06-SEP-2000.
XX
PF   21-FEB-2000; 2000EP-00200610.
XX
PR   26-FEB-1999;   99US-0122487P.
XX
PA   (GEST ) GENSET.
XX
PI   Dumas Milne Edwards J,  Duclert A,  Giordano J;
XX
DR   WPI; 2000-500381/45.
DR   N-PSDB; AAC02714.
XX
PT   New nucleic acid that is a 5' expressed sequence tag (5' EST) for
PT   obtaining cDNAs and genomic DNAs that correspond to 5'ESTs and for
PT   diagnostic, forensic, gene therapy and chromosome mapping procedures.
XX
PS   Claim 13; SEQ ID NO 6789; 71pp + Sequence Listing; English.
XX
CC   The present sequence is a polypeptide encoded by one of a large number of
CC   5' ESTs derived from mRNAs encoding secreted proteins. The 5' ESTs were
CC   prepared from total human RNAs or polyA+ RNAs derived from 30 different
CC   tissues. EST sequences usually correspond mainly to the 3' untranslated
CC   region (UTR) of the mRNA because they are often obtained from oligo-dT
CC   primed cDNA libraries. Such ESTs are not well suited for isolating cDNA
CC   sequences derived from the 5' ends of mRNAs and even in those cases where
CC   longer cDNA sequences have been obtained, the full 5' UTR is rarely
CC   included. 5' ESTs are derived from mRNAs with intact 5' ends and can
CC   therefore be used to obtain full length cDNAs and genomic DNAs. 5' ESTs
CC   are also used in diagnostic, forensic, gene therapy and chromosome
CC   mapping procedures. They are used to obtain upstream regulatory sequences
CC   and to design expression and secretion vectors
XX
SQ   Sequence 100 AA;

  Query Match           100.0%;  Score 25;  DB 3;  Length 100;
  Best Local Similarity   50.0%;  Pred. No. 1.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         90 SQGYVQHI 97


RESULT 44
ABR82047
ID   ABR82047 standard; protein; 101 AA.
XX
AC   ABR82047;
XX
DT   22-SEP-2003  (first entry)
XX
DE   C. elegans AMPK beta 2 amino acid region SEQ ID NO:21.
XX
KW   AMP kinase beta subunit oligosaccharide binding domain; AMP kinase;
KW   oligosaccharide binding domain; enzyme; antidiabetic; gene therapy;
KW   antiarteriosclerotic; anorectic; cytostatic; diabetes; atherosclerosis;
KW   obesity; cancer.
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XX
OS   Caenorhabditis elegans.
XX
PN   WO2003056032-A1.
XX
PD   10-JUL-2003.
XX
PF   23-DEC-2002; 2002WO-AU001769.
XX
PR   21-DEC-2001; 2001AU-00009728.
XX
PA   (SVIN-) ST VINCENTS INST MEDICAL RES.
XX
PI   Stapleton D,  Kemp BE;
XX
DR   WPI; 2003-559281/52.
XX
PT   Screening for a compound that modulates the binding of an oligosaccharide
PT   to a beta subunit of AMP kinase by assessing the ability of the candidate
PT   compound to modulate binding of the polypeptide to the oligosaccharide.
XX
PS   Example; Fig 9; 86pp; English.
XX
CC   The present invention describes a method of screening for a compound that
CC   modulates the binding of an oligosaccharide to a beta subunit of AMP
CC   kinase. The method comprises: (1) exposing a candidate compound to an
CC   oligosaccharide and a polypeptide comprising a beta subunit of AMP
CC   kinase, or its mutant and/or fragment that binds an oligosaccharide; and
CC   (2) assessing the ability of the candidate compound to modulate binding
CC   of the polypeptide to the oligosaccharide. An AMP kinase beta subunit
CC   oligosaccharide binding domain sequence has antidiabetic, cytostatic,
CC   antiarteriosclerotic and anorectic activities, and can be used in gene
CC   therapy. The method is useful for screening for a compound that modulates
CC   the binding of an oligosaccharide to a beta subunit of AMP kinase for
CC   treating or preventing a condition associated with AMP kinase activity
CC   e.g., diabetes, atherosclerosis, obesity or cancer. The present sequence
CC   represents a C. elegans AMPK beta 2 region which is given in comparison
CC   with the rat beta-1 AMP kinase oligosaccharide binding domain amino acid
CC   sequence in the exemplification of the present invention
XX
SQ   Sequence 101 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 101;
  Best Local Similarity   50.0%;  Pred. No. 1.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         23 AQPRVVHI 30


RESULT 45
AAO03068
ID   AAO03068 standard; protein; 107 AA.
XX
AC   AAO03068;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polypeptide SEQ ID NO 16960.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorders; arthritis; inflammation.
XX
OS   Homo sapiens.
XX
PN   WO200164835-A2.
XX
PD   07-SEP-2001.
XX
PF   26-FEB-2001; 2001WO-US004927.
XX
PR   28-FEB-2000; 2000US-00515126.
PR   18-MAY-2000; 2000US-00577409.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT;
XX
DR   WPI; 2001-514838/56.
DR   N-PSDB; AAI82999.
XX
PT   Isolated nucleic acids and polypeptides, useful for preventing diagnosing
PT   and treating e.g. leukemia, inflammation and immune disorders.
XX
PS   Claim 20; SEQ ID NO 16960; 1399pp + Sequence Listing; English.
XX
CC   The invention relates to human polynucleotides (AAI79941-AAI93841) and
CC   the encoded proteins (AAO00010-AAO13910) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: The sequence data for this patent did not form part
CC   of the printed specification, but was obtained in electronic format
CC   directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 107 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 107;
  Best Local Similarity   50.0%;  Pred. No. 2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         52 RQQNVNHI 59


RESULT 46
AAG55413
ID   AAG55413 standard; protein; 113 AA.
XX
AC   AAG55413;
XX
DT   18-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 71047.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
XX
PF   25-FEB-2000; 2000EP-00301439.
XX
PR   25-FEB-1999;   99US-0121825P.
PR   05-MAR-1999;   99US-0123180P.
PR   09-MAR-1999;   99US-0123548P.
PR   23-MAR-1999;   99US-0125788P.
PR   25-MAR-1999;   99US-0126264P.
PR   29-MAR-1999;   99US-0126785P.
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PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 113;
Best Local Similarity 50.0%; Pred. No. 2.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 XQXXVXHI 8
              :|::|:||
Db        100 SQFKVAHI 107
```

RESULT 47
AAG55412
ID AAG55412 standard; protein; 117 AA.
XX
AC AAG55412;
XX
DT 18-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 71046.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
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PR 19-JUL-1999; 99US-0144325P.
PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 19-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144352P.
PR 20-JUL-1999; 99US-0144632P.
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PR 21-JUL-1999; 99US-0144814P.
PR 21-JUL-1999; 99US-0145086P.
PR 21-JUL-1999; 99US-0145088P.

PR 22-JUL-1999; 99US-0145085P.
PR 22-JUL-1999; 99US-0145087P.
PR 22-JUL-1999; 99US-0145089P.
PR 22-JUL-1999; 99US-0145192P.
PR 23-JUL-1999; 99US-0145145P.
PR 23-JUL-1999; 99US-0145218P.
PR 23-JUL-1999; 99US-0145224P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 27-JUL-1999; 99US-0145919P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 02-AUG-1999; 99US-0146389P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147192P.
PR 05-AUG-1999; 99US-0147260P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147493P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148319P.
PR 12-AUG-1999; 99US-0148341P.
PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148684P.
PR 16-AUG-1999; 99US-0149368P.
PR 17-AUG-1999; 99US-0149175P.
PR 18-AUG-1999; 99US-0149426P.
PR 20-AUG-1999; 99US-0149722P.
PR 20-AUG-1999; 99US-0149723P.
PR 20-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156458P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
PR 13-OCT-1999; 99US-0159294P.
PR 13-OCT-1999; 99US-0159295P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.
PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
PR 14-OCT-1999; 99US-0159638P.
PR 18-OCT-1999; 99US-0159584P.
PR 21-OCT-1999; 99US-0160741P.
PR 21-OCT-1999; 99US-0160767P.
PR 21-OCT-1999; 99US-0160768P.
PR 21-OCT-1999; 99US-0160770P.
PR 21-OCT-1999; 99US-0160814P.
PR 21-OCT-1999; 99US-0160815P.
PR 22-OCT-1999; 99US-0160980P.
PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 117;
Best Local Similarity 50.0%; Pred. No. 2.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 104 SQFKVAHI 111

RESULT 48
ABB89102
ID ABB89102 standard; protein; 117 AA.
XX
AC ABB89102;
XX
DT 24-MAY-2002 (first entry)
XX
DE Human polypeptide SEQ ID NO 1478.
XX
KW Cytostatic; immunosuppressive; nootropic; neuroprotective; antiviral;
KW antiallergic; hepatotropic; antidiabetic; antiinflammatory; antiulcer;
KW vulnerary; anticonvulsant; antibacterial; antifungal; antiparasitic;
KW cardiant; gene therapy; cancer; immune disorder; cardiovascular disorder;
KW neurological disease; infection; human; secreted protein.
XX
OS Homo sapiens.
XX
PN WO200190304-A2.
XX
PD 29-NOV-2001.
XX
PF 18-MAY-2001; 2001WO-US016450.
XX
PR 19-MAY-2000; 2000US-0205515P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Birse CE, Rosen CA;
XX
DR WPI; 2002-122018/16.
DR N-PSDB; ABL89511.
XX
PT Novel 1405 isolated polypeptides, useful for diagnosis, treatment and
PT prevention of neural, immune system, muscular, reproductive,
PT gastrointestinal, pulmonary, cardiovascular, renal and proliferative
PT disorders.
XX
PS Claim 11; SEQ ID NO 1478; 2081pp + Sequence Listing; English.
XX
CC The invention relates to novel genes (ABL89449-ABL90853) and proteins
CC (ABB89040-ABB90444) useful for preventing, treating or ameliorating
CC medical conditions e.g. by protein or gene therapy. The genes are
CC isolated from a range of human tissues disclosed in the specification.
CC The nucleic acids, proteins, antibodies and (ant)agonists are useful in
CC the diagnosis, treatment and prevention of: (a) cancer, e.g. breast and

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CC   ovarian cancer and other cancers of the adrenal gland, bone, bone marrow,
CC   breast, gastrointestinal tract, liver, lung, or urogenital; (b) immune
CC   disorders e.g. Addison's disease, allergies, autoimmune haemolytic
CC   anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's disease,
CC   multiple sclerosis, rheumatoid arthritis and ulcerative colitis; (c)
CC   cardiovascular disorders such as myocardial ischaemias; (d) wound healing
CC   ; (e) neurological diseases e.g. cerebral anoxia and epilepsy; and (f)
CC   infectious diseases such as viral, bacterial, fungal and parasitic
CC   infections. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 117 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 117;
  Best Local Similarity   50.0%;  Pred. No. 2.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         24 EQGLVSHI 31


RESULT 49
ABP05752
ID   ABP05752 standard; protein; 119 AA.
XX
AC   ABP05752;
XX
DT   24-JUN-2002  (first entry)
XX
DE   Human ORFX protein sequence SEQ ID NO:11486.
XX
KW   Human; open reading frame; ORFX; gene therapy; cancer; cirrhosis;
KW   hyperproliferative disorder; psoriasis; benign tumour; haemorrhage;
KW   degenerative disorder; osteoarthritis; neurodegenerative disorder;
KW   cardiovascular disease; diabetes mellitus; systemic lupus erythematosus;
KW   hypertension; hypothyroidism; cholesterol ester storage disease;
KW   immune deficiency; immune disorder; infectious disease;
KW   autoimmune disorder; rheumatoid arthritis; autoimmune thyroiditis;
KW   myasthenia gravis.
XX
OS   Homo sapiens.
XX
PN   WO200192523-A2.
XX
PD   06-DEC-2001.
XX
PF   29-MAY-2001; 2001WO-US010836.
XX
PR   30-MAY-2000; 2000US-0206132P.
PR   29-AUG-2000; 2000US-0228716P.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach MD;
XX
DR   WPI; 2002-106308/14.
DR   N-PSDB; ABN21504.
XX
PT   Novel human polypeptides and polynucleotides useful for diagnosing,
PT   preventing and treating cardiovascular disease, neurodegenerative,
PT   hyperproliferative disorders and autoimmune disorders.
XX
PS   Disclosure; SEQ ID NO 11486; 1037pp; English.
XX
CC   The present invention describes substantially purified human proteins
CC   (referred to as open reading frame, ORFX, where X is 1-11491 (see Table 1
CC   in the specification). ABN15762 to ABN27252 encode the human ORFX
CC   proteins given in ABP00010 to ABP11500. ORFX proteins are useful for
CC   treating or preventing a pathology associated with an ORFX-associated
CC   disorder in humans, and in the manufacture of a medicament for treating a
CC   syndrome associated with ORFX-associated disorder. ORFX polynucleotide
CC   sequences can be used in gene therapy. ORFX sequences can be used in the
CC   treatment of cancer, hyperproliferative disorders, cirrhosis of liver,
CC   psoriasis, benign tumours, keloid, degenerative disorders, haemorrhage,
CC   osteoarthritis, neurodegenerative disorders, disorders related to organ
CC   transplantation, cardiovascular diseases, diabetes mellitus, systemic
CC   lupus erythematosus, hypertension, hypothyroidism, cholesterol ester
CC   storage disease, various immune deficiencies and disorders, infectious
CC   diseases, autoimmune disorders such as multiple sclerosis, rheumatoid
CC   arthritis, autoimmune thyroiditis, myasthenia gravis, graft-versus-host
CC   disease and autoimmune inflammatory eye disease. ORFX proteins are also
CC   useful for treating burns, incisions, ulcers, for treating osteoporosis,
CC   bone degenerative disorders, or periodontal disease, and for gut
CC   protection or regeneration and treatment of lung or liver fibrosis,
CC   reperfusion injury in various tissues and conditions resulting from
CC   systemic cytokine damage. N.B. The sequence data for this patent did not
CC   form part of the printed specification, but was obtained in electronic
CC   format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 119 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 119;
  Best Local Similarity   50.0%;  Pred. No. 2.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         34 TQFHVDHI 41


RESULT 50
ADA33447
ID   ADA33447 standard; protein; 121 AA.
XX
AC   ADA33447;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Acinetobacter baumannii protein #608.
XX
KW   Acinetobacter baumannii; bacterial disease; antibacterial; vaccine;
KW   plant biocontrol agent.
XX
OS   Acinetobacter baumannii.
XX
PN   US6562958-B1.
XX
PD   13-MAY-2003.
XX
PF   04-JUN-1999;   99US-00328352.
XX
PR   09-JUN-1998;   98US-0088701P.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Breton G,  Bush D;
XX
DR   WPI; 2003-576092/54.
DR   N-PSDB; ADA29321.
XX
PT   New Acinetobacter baumanii proteins and nucleic acids, useful as reagents
PT   for diagnosing a bacterial disease, as components of antibacterial
PT   vaccines, as targets for antibacterial drugs, or as biocontrol agents for
PT   plants.
XX
PS   Example; SEQ ID NO 4734; 328pp; English.
XX
CC   The invention relates to isolated Acinetobacter baumannii nucleic acids.
CC   The A. baumannii nucleic acids and polypeptides are useful as reagents
CC   for diagnosing a bacterial disease, as components of antibacterial
CC   vaccines, as targets for antibacterial drugs, to detect the presence of
CC   A. baumannii and other Acinetobacter species in a sample, in screening
CC   compounds for the ability to interfere with the A. baumannii life cycle
CC   or to inhibit A. baumannii infection, and as biocontrol agents for
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CC   plants. The present sequence represents the amino acid sequence of an A.
CC   baumannii protein.
XX
SQ   Sequence 121 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 121;
  Best Local Similarity   50.0%;  Pred. No. 2.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         19 AQLLVRHI 26


RESULT 51
ABU00139
ID   ABU00139 standard; protein; 126 AA.
XX
AC   ABU00139;
XX
DT   17-JAN-2003  (first entry)
XX
DE   Human novel polypeptide #232.
XX
KW   Human; genetic disorder; gene mapping; medical imaging; cancer;
KW   neurodegenerative disorder; lymphoid cell disorder; osteoporosis;
KW   Parkinson's disease; Alzheimer's disease; bone degenerative disorder;
KW   osteoarthritis; periodontal disease; liver fibrosis; viral infection;
KW   fungal infection; bacterial infection; autoimmune disease; diabetes;
KW   atopic dermatitis.
XX
OS   Homo sapiens.
XX
PN   WO200274961-A1.
XX
PD   26-SEP-2002.
XX
PF   14-MAR-2002; 2002WO-US005109.
XX
PR   15-MAR-2001; 2001US-00810173.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Zhou P,  Goodrich R,  Asundi V,  Zhang J,  Zhao QA,  Ren F;
PI   Xue AJ,  Yang Y,  Ma Y,  Yamazaki V,  Chen R,  Wang Z,  Ghosh M;
PI   Wehrman T,  Wang J,  Wang D,  Drmanac RT;
XX
DR   WPI; 2003-040556/03.
DR   N-PSDB; ABX05217.
XX
PT   New isolated polypeptides and polynucleotides, useful for preventing,
PT   treating or ameliorating medical conditions, such as cancer,
PT   neurodegenerative disorders, lymphoid cell disorders, bone degenerative
PT   disorders, and infections.
XX
PS   Claim 9; SEQ ID NO 758; 235pp; English.
XX
CC   The invention relates to human polynucleotides and the polypeptides they
CC   encode. The polynucleotides and polypeptides are useful in diagnostics,
CC   forensics, gene mapping, medical imaging, identification of mutations
CC   responsible for genetic disorders or other traits, assessing biodiversity
CC   and producing many other types of data and products dependent on DNA and
CC   amino acid sequences. They are also useful for preventing, treating or
CC   ameliorating medical conditions, such as cancer, neurodegenerative
CC   disorders (e.g. Parkinson's disease, Alzheimer's disease), lymphoid cell
CC   disorders, osteoporosis, osteoarthritis, bone degenerative disorders,
CC   periodontal disease, liver fibrosis, infections (e.g. viral, fungal or
CC   bacterial) or autoimmune diseases (e.g. diabetes, atopic dermatitis).
CC   Sequences ABG99888-ABG99989 and ABU00010-ABU00433 represent human
CC   polypeptides of the invention. Note: The sequence data for this patent is
CC   not represented in the printed specification but is based on sequence
CC   information supplied by the European Patent Office
XX
SQ   Sequence 126 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 126;
  Best Local Similarity   50.0%;  Pred. No. 2.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         21 LQITVGHI 28


RESULT 52
AAY08249
ID   AAY08249 standard; protein; 129 AA.
XX
AC   AAY08249;
XX
DT   14-JUL-1999  (first entry)
XX
DE   Human cadherin-D protein fragment.
XX
KW   Cadherin-1; cadherin-2; cadherin-3; cadherin-4; cadherin-5; cell; CGDF;
KW   cadherin-6; cadherin-8; cadherin-B; cadherin-C; cadherin-D; antiulcer;
KW   cadherin-F; human; cadherin-derived growth factor; differentiation;
KW   proliferation; protective; antidiabetic; antiasthmatic; antiinflammatory;
KW   antitumour; wound healing; antiosteoporotic; cytoprotective; treatment;
KW   intracellular calcium release; MAP-kinase expression; degenerative; bone;
KW   metabolic; disease; osteoporosis; osteomalacia; osteopenia; pancreas;
KW   diabetes mellitus; muscle; dystrophy; vasculature; central; peripheral;
KW   nervous system; neuropathy; lung; bronchial asthma; stomach; ulcer;
KW   inflammation; tumour.
XX
OS   Homo sapiens.
XX
PN   WO9919477-A1.
XX
PD   22-APR-1999.
XX
PF   15-OCT-1998;   98WO-EP006547.
XX
PR   15-OCT-1997;   97DE-01045284.
PR   25-MAR-1998;   98DE-01013088.
XX
PA   (FORS/) FORSSMANN W.
XX
PI   Forssmann W,  Staendker L,  Meyer M,  Mostafavi H,  Opitz H,  Kling L;
XX
DR   WPI; 1999-277639/23.
XX
PT   Cadherin-derived growth factor peptides.
XX
PS   Claim 7; Page 41; 52pp; German.
XX
CC   This invention describes novel cadherin-derived growth factor (CDGF)
CC   peptides (AAY08237-Y08250) which correspond to a (partial) sequence of a
CC   pre-pro-cadherin consisting of the domains such as the signal sequence,
CC   pro-sequence, cadherin repeats, transmembrane region and intracellular
CC   region, with the peptide containing the pro-sequence but lacking at least
CC   one of the other domains of the pre-pro-cadherin. The peptides of the
CC   invention have cell proliferative, protective differentiation activities,
CC   antidiabetic, antiasthmatic, antiulcer, antiinflammatory, antitumour,
CC   wound healing, antiosteoporotic, cytoprotective activities and stimulate
CC   release of intracellular calcium which in turn induces expression of MAP-
CC   kinase. The peptides their variants, compounds that contain them, nucleic
CC   acid encoding them, their specific antibodies, antagonists and inhibitors
CC   are all useful for treatment and prevention of degenerative and metabolic
CC   diseases of bone (osteoporosis, osteomalacia and osteopenia), pancreas
CC   (diabetes mellitus), muscle (dystrophy), vasculature, central and
CC   peripheral nervous systems (neuropathy), lung (bronchial asthma), stomach
CC   (ulcers), also of inflammation, aberrant inflammatory responses, tumours,
CC   and in healing of wounds and bone. This sequence represents a cadherin-D
CC   (also known as cadherin-13) protein fragment
XX
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```
SQ   Sequence 129 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 129;
  Best Local Similarity   50.0%;  Pred. No. 2.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db          9 FQQKVFHI 16


RESULT 53
AAG82581
ID   AAG82581 standard; protein; 134 AA.
XX
AC   AAG82581;
XX
DT   03-SEP-2001  (first entry)
XX
DE   S. epidermidis open reading frame protein sequence SEQ ID NO:2256.
XX
KW   Staphylococcus epidermidis SR1 strain; infection; diagnosis; vaccination;
KW   endocarditis.
XX
OS   Staphylococcus epidermidis.
XX
PN   WO200134809-A2.
XX
PD   17-MAY-2001.
XX
PF   09-NOV-2000; 2000WO-US030782.
XX
PR   09-NOV-1999;   99US-0164258P.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Kimmerly WJ;
XX
DR   WPI; 2001-316495/33.
DR   N-PSDB; AAH53431.
XX
PT   Nucleic acids encoding polypeptides from Staphylococcus epidermidis,
PT   useful for vaccinating against infections, e.g. endocarditis.
XX
PS   Claim 18; Page 602; 2188pp; English.
XX
CC   AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
CC   (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
CC   and (II) can have antibacterial activity and therefore can be used in
CC   vaccination. The nucleic acids (I) may be used to produce the S.
CC   epidermidis polypeptides (II) via the production of vectors containing
CC   them which are used to produce hosts cells which express the
CC   polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
CC   used to vaccinate subjects and to raise antibodies against the bacteria.
CC   The polypeptides may also be used to assay for other inhibitors of their
CC   activity and therefore identify compounds that may be used for the
CC   treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
CC   AAH55090 represent specifically claimed S. epidermidis genomic DNA
CC   polynucleotide sequences from the present invention. AAH55091 to AAH55098
CC   represent oligonucleotide sequences and primers which are used in the
CC   exemplification of the present invention. N.B. The present invention
CC   specifically claims all the polynucleotide sequences given in the
CC   sequence listing of the present specification, however the sequence
CC   listing only goes up to SEQ ID NO:4454 so even though sequences are given
CC   in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
CC   for SEQ ID NO:4455 to 4464
XX
SQ   Sequence 134 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 134;
  Best Local Similarity   50.0%;  Pred. No. 2.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         75 AQYAVDHI 82


RESULT 54
ABP80506
ID   ABP80506 standard; protein; 136 AA.
XX
AC   ABP80506;
XX
DT   07-MAR-2003  (first entry)
XX
DE   N. gonorrhoeae amino acid sequence SEQ ID 7542.
XX
KW   Antibacterial; infection; vaccine; gene therapy.
XX
OS   Neisseria gonorrhoeae.
XX
PN   WO200279243-A2.
XX
PD   10-OCT-2002.
XX
PF   12-FEB-2002; 2002WO-IB002069.
XX
PR   12-FEB-2001; 2001GB-00003424.
XX
PA   (CHIR-) CHIRON SPA.
XX
PI   Fontana MR,  Pizza M,  Masignani V,  Monaci E;
XX
DR   WPI; 2003-058415/05.
DR   N-PSDB; ABZ41476.
XX
PT   New protein from Neisseria gonorrheae, useful for the manufacture of a
PT   medicament for treating or preventing N. gonorrheae infection.
XX
PS   Disclosure; Page 737; 815pp; English.
XX
CC   The present invention relates to proteins from Neisseria gonorrhoeae.
CC   Also disclosed are the nucleic acid molecules encoding the proteins and
CC   antibodies that specifically bind to the proteins. The composition
CC   comprising the protein, nucleic acid or antibody is useful for the
CC   manufacture of a medicament for treating or preventing N. gonorrhoeae
CC   infection, this may be in the form of a vaccine or gene therapy.
CC   Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC   molecules of the invention
XX
SQ   Sequence 136 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 136;
  Best Local Similarity   50.0%;  Pred. No. 2.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        111 SQMVVIHI 118


RESULT 55
AAB41164
ID   AAB41164 standard; protein; 143 AA.
XX
AC   AAB41164;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human ORFX ORF928 polypeptide sequence SEQ ID NO:1856.
XX
KW   Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW   vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW   anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW   immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
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KW   hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW   antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW   antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW   neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW   cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW   cholesterol ester storage; systemic lupus erythematosus; infection;
KW   severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW   allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW   bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW   thrombosis; contraceptive.
XX
OS   Homo sapiens.
XX
PN   WO200058473-A2.
XX
PD   05-OCT-2000.
XX
PF   31-MAR-2000; 2000WO-US008621.
XX
PR   31-MAR-1999;   99US-0127607P.
PR   02-APR-1999;   99US-0127636P.
PR   05-APR-1999;   99US-0127728P.
PR   30-MAR-2000; 2000US-00540763.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach M;
XX
DR   WPI; 2000-602362/57.
DR   N-PSDB; AAC75373.
XX
PT   Novel nucleic acids and peptides derived from open reading frame X,
PT   useful for treating e.g. cancers, proliferative disorders,
PT   neurodegenerative disorders and cardiovascular disease.
XX
PS   Claim 11; Page 1433; 5507pp; English.
XX
CC   AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC   which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC   sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC   antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic;
CC   anticonvulsant; antiarthritic; immunosuppressant; immunostimulant;
CC   cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
CC   dermatological; immunosuppressive; antiinflammatory; antibacterial;
CC   antiviral; antifungal; antirheumatic; antithyroid; and antianaemic. The
CC   sequences can be used for determining the presence of or predisposition
CC   to, or preventing or treating pathological conditions associated with an
CC   ORFX-associated disorder. The nucleic acids can be used to express ORFX
CC   proteins in gene therapy vectors. The proteins and nucleic acids may be
CC   used to treat cancers, proliferative disorders, neurodegenerative
CC   disorders, osteoarthritis, graft vs host disease, cardiovascular disease,
CC   diabetes mellitus, hypertension, hypothyroidism, cholesterol ester
CC   storage, systemic lupus erythematosus, severe combined immunodeficiency
CC   (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune
CC   disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and
CC   cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to
CC   enhance coagulation; to inhibit thrombosis; and as a contraceptive
XX
SQ   Sequence 143 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 143;
  Best Local Similarity   50.0%;  Pred. No. 2.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        130 MQRTVCHI 137


RESULT 56
ABP79474
ID   ABP79474 standard; protein; 148 AA.
XX
AC   ABP79474;
XX
DT   07-MAR-2003  (first entry)
XX
DE   N. gonorrhoeae amino acid sequence SEQ ID 5478.
XX
KW   Antibacterial; infection; vaccine; gene therapy.
XX
OS   Neisseria gonorrhoeae.
XX
PN   WO200279243-A2.
XX
PD   10-OCT-2002.
XX
PF   12-FEB-2002; 2002WO-IB002069.
XX
PR   12-FEB-2001; 2001GB-00003424.
XX
PA   (CHIR-) CHIRON SPA.
XX
PI   Fontana MR,  Pizza M,  Masignani V,  Monaci E;
XX
DR   WPI; 2003-058415/05.
DR   N-PSDB; ABZ40444.
XX
PT   New protein from Neisseria gonorrheae, useful for the manufacture of a
PT   medicament for treating or preventing N. gonorrheae infection.
XX
PS   Disclosure; Page 588; 815pp; English.
XX
CC   The present invention relates to proteins from Neisseria gonorrhoeae.
CC   Also disclosed are the nucleic acid molecules encoding the proteins and
CC   antibodies that specifically bind to the proteins. The composition
CC   comprising the protein, nucleic acid or antibody is useful for the
CC   manufacture of a medicament for treating or preventing N. gonorrhoeae
CC   infection, this may be in the form of a vaccine or gene therapy.
CC   Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC   molecules of the invention
XX
SQ   Sequence 148 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 148;
  Best Local Similarity   50.0%;  Pred. No. 3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db          2 FQTFVQHI 9


RESULT 57
ABB68804
ID   ABB68804 standard; protein; 151 AA.
XX
AC   ABB68804;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster polypeptide SEQ ID NO 33204.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US009231.
XX
PR   23-MAR-2000; 2000US-0191637P.
PR   11-JUL-2000; 2000US-00614150.
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```
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   N-PSDB; ABL12907.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signaling and cell-cell
PT   interactions.
XX
PS   Disclosure; SEQ ID NO 33204; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-
CC   ABB72072). The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 151 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 151;
  Best Local Similarity   50.0%;  Pred. No. 3.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         63 DQEIVSHI 70


RESULT 58
ABB08007
ID   ABB08007 standard; protein; 151 AA.
XX
AC   ABB08007;
XX
DT   27-AUG-2002  (first entry)
XX
DE   Human lipid metabolism enzyme (LME)-7 (Id: 7484022CD1).
XX
KW   Human; lipid metabolism enzyme; LME; cytostatic; neuroprotective;
KW   nootropic; cerebroprotective; antiparkinsonian; antialzheimers; vaccine;
KW   antisclerotic; antimicrobial; anti-AIDS; cardiovascular; antianginal;
KW   gene therapy; protein therapy; enzyme.
XX
OS   Homo sapiens.
XX
PN   WO200229036-A2.
XX
PD   11-APR-2002.
XX
PF   05-OCT-2001; 2001WO-US031302.
XX
PR   06-OCT-2000; 2000US-0238388P.
PR   13-OCT-2000; 2000US-0240616P.
PR   02-NOV-2000; 2000US-0245719P.
PR   08-NOV-2000; 2000US-0247503P.
PR   17-NOV-2000; 2000US-0249503P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Harland L,  Arvizu C,  Das D,  Griffin JA,  Baughn MR,  Ding L;
PI   Walia NK,  Yao MG,  Lu Y,  Elliott VS,  Thangavelu K,  Ramkumar J;
PI   Lal PG,  Tribouley CM;
XX
DR   WPI; 2002-315862/35.
DR   N-PSDB; ABL60543.
XX
PT   Lipid Metabolism Enzymes and nucleic acids, useful for preventing,
PT   diagnosing and treating e.g. cancer, Alzheimer's disease and Creutzfeld-
PT   Jakob disease.
XX
PS   Claim 1; Page 119; 127pp; English.
XX
CC   The invention relates to human lipid metabolism enzymes (LMEs) and
CC   encoding polynucleotides. The LMEs can be expressed by standard
CC   recombinant technology. The LME polypeptides, polynucleotides and
CC   modulators may be used in the prevention, diagnosis and treatment of
CC   diseases associated with inappropriate LME expression such as cancer
CC   (e.g. myeloma, sarcoma and breast cancer), neurological disorders (e.g.
CC   Parkinson's, Alzheimer's and multiple sclerosis), microbial infections
CC   (e.g. Creutzfeld-Jakob disease and Acquired Immune deficiency syndrome
CC   (AIDS)) and/or cardiovascular disorders (e.g. cardiomyopathy, angina
CC   pectoris and mitral valve prolapse). The present sequence represents the
CC   human LME-7 polypeptide
XX
SQ   Sequence 151 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 151;
  Best Local Similarity   50.0%;  Pred. No. 3.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         25 FQRRVKHI 32


RESULT 59
AAG63223
ID   AAG63223 standard; protein; 152 AA.
XX
AC   AAG63223;
XX
DT   01-OCT-2001  (first entry)
XX
DE   Amino acid sequence of a human lipid metabolism enzyme.
XX
KW   Human; lipid metabolism enzyme; LME; cancer; neurological disorder;
KW   autoimmune disorder; inflammatory disorder; gastrointestinal disorder;
KW   cardiovascular disorder; motor neuron disorder; multiple sclerosis;
KW   demyelinating disease; developmental disorder; gene therapy.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .21
FT                   /note= "signal peptide"
FT   Modified-site   34
FT                   /note= "potential phosphorylation site"
FT   Modified-site   61
FT                   /note= "potential phosphorylation site"
FT   Modified-site   70
FT                   /note= "potential phosphorylation site"
XX
PN   WO200153468-A2.
XX
PD   26-JUL-2001.
XX
PF   18-JAN-2001; 2001WO-US002060.
XX
PR   21-JAN-2000; 2000US-0177732P.
PR   28-JAN-2000; 2000US-0178885P.
PR   11-FEB-2000; 2000US-0181863P.
PR   17-FEB-2000; 2000US-0183683P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Yue H,  Hillman JL,  Tang YT,  Azimzai Y,  Gandhi AR,  Baughn MR;
PI   Lu DAM,  Nguyen DB,  Walia NK;
XX
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```
DR   WPI; 2001-476115/51.
DR   N-PSDB; AAH42606.
XX
PT   New lipid metabolism enzymes and the polynucleotides encoding them,
PT   useful in diagnosing, treating, and preventing cancer, neurological,
PT   autoimmune, inflammatory, gastrointestinal or cardiovascular disorders.
XX
PS   Claim 1; Page 111; 121pp; English.
XX
CC   The present sequence represents a human lipid metabolism enzyme (LME).
CC   LME proteins and nucleic acids are useful in diagnosing, treating, and
CC   preventing cancer, neurological, autoimmune, inflammatory,
CC   gastrointestinal, and cardiovascular disorders, and in assessing the
CC   effects of exogenous compounds on the expression LME. LME may also be
CC   used to treat or prevent a disorder associated with decreased expression
CC   or activity of LME, such as tumours or cancers (e.g. adenocarcinoma,
CC   leukemia, lymphoma), motor neuron disorders, multiple scleroses and other
CC   demyelinating diseases, developmental disorders of the central nervous
CC   system, bacterial, viral, fungal and parasitic diseases. LME may further
CC   be used to screen for compounds that specifically bind to or modulate the
CC   activity of LME, and to produce antibodies. LME polynucleotides are
CC   useful for somatic and germline gene therapy, to detect and quantify gene
CC   expression in biopsied tissues in which expression of LME may be
CC   correlated with disease, to detect the presence of associated disorders,
CC   to analyse the proteome of a tissue or cell type, to generate
CC   hybridization probes, and to screen libraries of compounds in various
CC   drug screening techniques
XX
SQ   Sequence 152 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 152;
  Best Local Similarity   50.0%;  Pred. No. 3.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         26 FQRRVKHI 33


RESULT 60
AAO29517
ID   AAO29517 standard; protein; 152 AA.
XX
AC   AAO29517;
XX
DT   27-AUG-2003  (first entry)
XX
DE   Human phospholipase (33524).
XX
KW   Human; urological disorder; stress urinary incontinence; prostate cancer;
KW   benign prostatic hyperplasia; overactive bladder; oversensitive bladder;
KW   overflow urinary incontinence; gene therapy; nephrotropic; prostatitis;
KW   kidney disorder; enzyme; phospholipase.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 142
FT                   /label= Unknown
FT                   /note= "Encoded by CRG"
XX
PN   WO2003039475-A2.
XX
PD   15-MAY-2003.
XX
PF   07-NOV-2002; 2002WO-US035824.
XX
PR   07-NOV-2001; 2001US-0344552P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Silos-Santiago I;
XX
DR   WPI; 2003-449396/42.
DR   N-PSDB; AAL59915.
XX
PT   Identifying a compound, capable of treating urological disorder e.g.,
PT   benign prostatic hyperplasia, by assaying the ability of the compound to
PT   modulate 313, 333, 5464, 188717 or 33524 nucleic acid expression or
PT   polypeptide activity.
XX
PS   Disclosure; Page 87; 87pp; English.
XX
CC   The invention relates to a method for treating an urological disorder
CC   which comprises assaying the ability of the compound to modulate 313,
CC   333, 5464, 188717 or 33524 nucleic acid expression or polypeptide
CC   activity. The method is useful for identifying a compound for treating an
CC   urological disorder comprising urinary incontinence e.g., overactive/
CC   oversensitive bladder, overflow urinary incontinence, stress urinary
CC   incontinence caused by dysfunction of the bladder, urethra or central/
CC   peripheral nervous system, prostatitis, benign prostatic hyperplasia,
CC   prostate cancer or kidney disorders. It is also used in gene therapy. The
CC   present sequence is human phospholipase (33524) protein. This sequence is
CC   used to illustrate the method of the invention
XX
SQ   Sequence 152 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 152;
  Best Local Similarity   50.0%;  Pred. No. 3.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         26 FQRRVKHI 33


RESULT 61
ADC39186
ID   ADC39186 standard; protein; 157 AA.
XX
AC   ADC39186;
XX
DT   18-DEC-2003  (first entry)
XX
DE   Novel human NOVX polypeptide  SEQ ID NO: 128.
XX
KW   antidiabetic; cytostatic; immunomodulator; anorectic; antilipemic;
KW   nootropic; neuroprotective; immunostimulant; antiparkinsonian; anti-HIV;
KW   antiasthmatic; antiinflammatory; hypotensive; antiarteriosclerotic;
KW   hemostatic; osteopathic; gene therapy.; NOVX; diabetes; obesity; cancer;
KW   lymphoma; uterus cancer; prostate cancer; dyslipidemia; anorexia;
KW   wasting disorder; Alzheimer's disease; Parkinson's disorder; cachexia;
KW   cardiomyopathy; AIDS; asthma; Crohn's disease; multiple sclerosis;
KW   hypertension; atherosclerosis; hemophilia; graft-versus-host disease;
KW   Albright hereditary osteodystrophy.
XX
OS   Homo sapiens.
XX
PN   WO2003010327-A2.
XX
PD   06-FEB-2003.
XX
PF   02-MAY-2002; 2002WO-US014199.
XX
PR   02-MAY-2001; 2001US-0288063P.
PR   03-MAY-2001; 2001US-0288395P.
PR   07-MAY-2001; 2001US-0289087P.
PR   09-MAY-2001; 2001US-0289817P.
PR   09-MAY-2001; 2001US-0289818P.
PR   11-MAY-2001; 2001US-0290194P.
PR   14-MAY-2001; 2001US-0290753P.
PR   15-MAY-2001; 2001US-0291181P.
PR   16-MAY-2001; 2001US-0291243P.
PR   18-MAY-2001; 2001US-0292001P.
PR   21-MAY-2001; 2001US-0292374P.
PR   22-MAY-2001; 2001US-0292587P.
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PR   23-MAY-2001; 2001US-0293107P.
PR   25-MAY-2001; 2001US-0293747P.
PR   29-MAY-2001; 2001US-0294109P.
PR   29-MAY-2001; 2001US-0294110P.
PR   30-MAY-2001; 2001US-0294434P.
PR   31-MAY-2001; 2001US-0294827P.
PR   12-JUL-2001; 2001US-0304879P.
PR   31-JUL-2001; 2001US-0308901P.
PR   14-AUG-2001; 2001US-0312270P.
PR   17-AUG-2001; 2001US-0313416P.
PR   10-SEP-2001; 2001US-0318463P.
PR   27-SEP-2001; 2001US-0325683P.
PR   18-OCT-2001; 2001US-0330292P.
PR   28-NOV-2001; 2001US-0333873P.
PR   03-DEC-2001; 2001US-0336909P.
PR   03-DEC-2001; 2001US-0337552P.
PR   21-FEB-2002; 2002US-0359245P.
PR   01-MAY-2002; 2002US-00136826.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Miller CE,  Kekuda R,  Malyankar UM,  Li L,  Pena CEA,  Spytek KA;
PI   Gorman L,  Guo X,  Fernandes ER,  Smithson G,  Stone DJ,  Zerhusen BD;
PI   Patturajan M,  Anderson DW,  Mezes PS,  Peyman JA,  Macdougall JR;
PI   Padigaru M,  Rastelli L,  Shenoy SG,  Gerlach VL,  Shimkets RA,  Zhong M;
PI   Edinger SR,  Ellerman K;
XX
DR   WPI; 2003-239445/23.
DR   N-PSDB; ADC39185.
XX
PT   New NOVX polypeptides and polynucleotides, useful in gene therapy,
PT   particularly for treating or preventing a syndrome associated with a
PT   human disease e.g. diabetes, obesity, cancer, Alzheimer's disease,
PT   hypertension or hemophilia.
XX
PS   Claim 1; SEQ ID NO 128; 748pp; English.
XX
CC   The invention relates to new isolated NOVX polypeptides, the genes
CC   encoding them or sequences having at least 95% identity to the amino acid
CC   or nucleotide sequences. The NOVX polypeptide is useful as a therapeutic,
CC   particularly in the manufacture of a medicament for treating a syndrome
CC   associated with a human disease, which includes a pathology associated
CC   with NOVX polypeptide. The NOVX polypeptide is particularly useful for
CC   treating, preventing or alleviating pathology associated with NOVX
CC   polypeptide in a mammal, e.g. a human. The NOVX nucleic acid and
CC   polypeptide are especially useful for treating or preventing e.g.
CC   diabetes, obesity, cancers (e.g. lymphoma, uterus cancer or prostate
CC   cancer), dyslipidemias, anorexia, wasting disorders, Alzheimer's disease,
CC   Parkinson's disorder, cachexia, cardiomyopathy, AIDS, asthma, Crohn's
CC   disease, multiple sclerosis, hypertension, atherosclerosis, hemophilia,
CC   graft-versus-host disease or Albright hereditary osteodystrophy. The DNA
CC   encoding the protein is useful in gene therapy for treating the above
CC   conditions. These are also useful in developing powerful assay system for
CC   functional analysis of various human disorders, as well as in diagnostic
CC   applications. This sequence represents one of the NOVX proteins of the
CC   invention.
XX
SQ   Sequence 157 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 157;
  Best Local Similarity   50.0%;  Pred. No. 3.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         31 FQRRVKHI 38


RESULT 62
AAR63044
ID   AAR63044 standard; protein; 158 AA.
XX
AC   AAR63044;
XX
DT   25-MAR-2003  (revised)
DT   15-AUG-1995  (first entry)
XX
DE   RPLA2-8.
XX
KW   RPLA2-8; phospholipase A2; PLA2; Batten disease;
KW   neuronal ceroid lipfuscinosis; gene therapy.
XX
OS   Rattus sp.
XX
PN   WO9502328-A1.
XX
PD   26-JAN-1995.
XX
PF   15-JUL-1994;   94WO-US007926.
XX
PR   15-JUL-1993;   93US-00091941.
PR   26-JUL-1993;   93US-00097354.
XX
PA   (INDV ) UNIV INDIANA FOUND.
PA   (INCY-) INCYTE PHARM INC.
XX
PI   Tischfield JA,  Seilhamer JJ;
XX
DR   WPI; 1995-067096/09.
DR   N-PSDB; AAQ81136.
XX
PT   Novel type III and IV low mol. wt. phospholipase A2 enzymes - from humans
PT   and rats, also nucleic acid sequences useful, e.g. for recombinant prodn.
PT   of enzymes, research into Batten's disease, etc.
XX
PS   Claim 5; Page 57-60; 160pp; English.
XX
CC   A human PLA2-encoding cDNA (AAQ81138) expressing HPLA2-10, was isolated
CC   from human brain RNA by RACE-PCR. 2 Rat PLA2 cDNAs, designated RPLA2-8
CC   (AAQ81136) and RPLA2-10 (AAQ81137), were isolated from rat brain and
CC   heart cDNA libraries, respectively. A partial human genomic counterpart
CC   to RPLA2-8, HPLA2-8 (AAQ81139), was also obtained. RPLA2-8 and HPLA2-8
CC   have been designated type III PLA2, and RPLA2-10 and HPLA2-10 as type IV.
CC   (Updated on 25-MAR-2003 to correct PN field.)
XX
SQ   Sequence 158 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 158;
  Best Local Similarity   50.0%;  Pred. No. 3.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         33 FQRMVKHI 40


RESULT 63
AAG82778
ID   AAG82778 standard; protein; 158 AA.
XX
AC   AAG82778;
XX
DT   03-SEP-2001  (first entry)
XX
DE   S. epidermidis open reading frame protein sequence SEQ ID NO:2650.
XX
KW   Staphylococcus epidermidis SR1 strain; infection; diagnosis; vaccination;
KW   endocarditis.
XX
OS   Staphylococcus epidermidis.
XX
PN   WO200134809-A2.
XX
PD   17-MAY-2001.
XX
PF   09-NOV-2000; 2000WO-US030782.
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XX
PR   09-NOV-1999;   99US-0164258P.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Kimmerly WJ;
XX
DR   WPI; 2001-316495/33.
DR   N-PSDB; AAH53628.
XX
PT   Nucleic acids encoding polypeptides from Staphylococcus epidermidis,
PT   useful for vaccinating against infections, e.g. endocarditis.
XX
PS   Claim 18; Page 695; 2188pp; English.
XX
CC   AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
CC   (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
CC   and (II) can have antibacterial activity and therefore can be used in
CC   vaccination. The nucleic acids (I) may be used to produce the S.
CC   epidermidis polypeptides (II) via the production of vectors containing
CC   them which are used to produce hosts cells which express the
CC   polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
CC   used to vaccinate subjects and to raise antibodies against the bacteria.
CC   The polypeptides may also be used to assay for other inhibitors of their
CC   activity and therefore identify compounds that may be used for the
CC   treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
CC   AAH55090 represent specifically claimed S. epidermidis genomic DNA
CC   polynucleotide sequences from the present invention. AAH55091 to AAH55098
CC   represent oligonucleotide sequences and primers which are used in the
CC   exemplification of the present invention. N.B. The present invention
CC   specifically claims all the polynucleotide sequences given in the
CC   sequence listing of the present specification, however the sequence
CC   listing only goes up to SEQ ID NO:4454 so even though sequences are given
CC   in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
CC   for SEQ ID NO:4455 to 4464
XX
SQ   Sequence 158 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 158;
  Best Local Similarity   50.0%;  Pred. No. 3.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         51 EQPMVAHI 58


RESULT 64
ABG06244
ID   ABG06244 standard; protein; 159 AA.
XX
AC   ABG06244;
XX
DT   13-FEB-2002  (first entry)
XX
DE   Novel human diagnostic protein #6235.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   N-PSDB; AAS70431.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 20; SEQ ID NO 36603; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC   amino acid sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 159 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 159;
  Best Local Similarity   50.0%;  Pred. No. 3.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         48 LQPVVEHI 55


RESULT 65
ABB99217
ID   ABB99217 standard; protein; 159 AA.
XX
AC   ABB99217;
XX
DT   16-DEC-2002  (first entry)
XX
DE   Ribosomal protein S11-17.49.
XX
KW   Ribosomal protein S11-17.49; cancer; HIV.
XX
OS   Unidentified.
XX
PN   CN1342675-A.
XX
PD   03-APR-2002.
XX
PF   12-SEP-2000; 2000CN-00125122.
XX
PR   12-SEP-2000; 2000CN-00125122.
XX
PA   (BODE-) BODE GENE DEV CO LTD SHANGHAI.
XX
PI   Mao Y,  Xie Y;
XX
DR   WPI; 2002-520753/56.
DR   N-PSDB; ABV72706.
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XX
PT   Novel ribosomal protein S11-17.49 for treating e.g. cancer and HIV
PT   infection.
XX
PS   Claim 1; Page 25-26 (Disclosure); 30pp; Chinese.
XX
CC   The invention relates to the novel ribosomal protein S11-17.49, and the
CC   polynucleotide encoding it. The ribosomal protein is useful for treating
CC   several diseases such as cancer and HIV infection. The sequence
CC   represents the ribosomal protein S11-17.49 of the invention
XX
SQ   Sequence 159 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 159;
  Best Local Similarity   50.0%;  Pred. No. 3.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        105 KQKGVIHI 112


RESULT 66
AAU49164
ID   AAU49164 standard; protein; 161 AA.
XX
AC   AAU49164;
XX
DT   27-FEB-2002  (first entry)
XX
DE   Propionibacterium acnes immunogenic protein #10060.
XX
KW   SAPHO syndrome; synovitis; acne; pustulosis; hypertosis; osteomyelitis;
KW   uveitis; endophthalmitis; bone; joint; central nervous system; ELISA;
KW   inflammatory lesion; acne vulgaris; enzyme linked immunosorbent assay;
KW   dermatological; osteopathic; neuroprotectant.
XX
OS   Propionibacterium acnes.
XX
PN   WO200181581-A2.
XX
PD   01-NOV-2001.
XX
PF   20-APR-2001; 2001WO-US012865.
XX
PR   21-APR-2000; 2000US-0199047P.
PR   02-JUN-2000; 2000US-0208841P.
PR   07-JUL-2000; 2000US-0216747P.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Skeiky YAW,  Persing DH,  Mitcham JL,  Wang SS,  Bhatia A;
PI   L'maisonneuve J,  Zhang Y,  Jen S,  Carter D;
XX
DR   WPI; 2001-616774/71.
DR   N-PSDB; AAS59545.
XX
PT   Propionibacterium acnes polypeptides and nucleic acids useful for
PT   vaccinating against and diagnosing infections, especially useful for
PT   treating acne vulgaris.
XX
PS   Example 1; SEQ ID NO 10359; 1069pp; English.
XX
CC   Sequences AAU39105-AAU68017 represent Propionibacterium acnes immunogenic
CC   polypeptides. The proteins and their associated DNA sequences are used in
CC   the treatment, prevention and diagnosis of medical conditions caused by
CC   P. acnes. The disorders include SAPHO syndrome (synovitis, acne,
CC   pustulosis, hypertosis and osteomyelitis), uveitis and endophthalmitis.
CC   P. acnes is also involved in infections of bone, joints and the central
CC   nervous system, however it is particularly involved in the inflammatory
CC   lesions associated with acne vulgaris. A method for detecting the
CC   presence or absence of P. acnes in a patient comprises contacting a
CC   sample with a binding agent that binds to the proteins of the invention
CC   and determining the amount of bound protein in the sample. The
CC   polypeptides may be used as antigens in the production of antibodies
CC   specific for P. acnes proteins. These antibodies can be used to
CC   downregulate expression and activity of P. acnes polypeptides and
CC   therefore treat P. acnes infections. The antibodies may also be used as
CC   diagnostic agents for determining P. acnes presence, for example, by
CC   enzyme linked immunosorbent assay (ELISA). Note: The sequence data for
CC   this patent did not form part of the printed specification, but was
CC   obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 161 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 161;
  Best Local Similarity   50.0%;  Pred. No. 3.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         72 SQGGVPHI 79


RESULT 67
ABM45683
ID   ABM45683 standard; protein; 161 AA.
XX
AC   ABM45683;
XX
DT   20-OCT-2003  (first entry)
XX
DE   Propionibacterium acnes predicted ORF-encoded polypeptide #10359.
XX
KW   Acne vulgaris; antiseborrhoeic; dermatological; antibacterial;
KW   immunostimulant; immune response; vaccine.
XX
OS   Propionibacterium acnes.
XX
PN   WO2003033515-A1.
XX
PD   24-APR-2003.
XX
PF   11-OCT-2002; 2002WO-US032727.
XX
PR   15-OCT-2001; 2001US-00978825.
XX
PA   (CORI-) CORIXA CORP.
XX
PI   Mitcham JL,  Skeiky YAW,  Persing DH,  Bhatia A,  Maisonneuve JL;
PI   Zhang Y,  Wang S,  Jen S,  Lodes MJ,  Benson DR,  Jones R,  Carter D;
PI   Barth B,  Vallieve-Douglass J;
XX
DR   WPI; 2003-381789/36.
DR   N-PSDB; ACF64474.
XX
PT   New Propionibacterium acnes polypeptides and polynucleotides encoding the
PT   polypeptide, useful for diagnosing, preventing or treating acne vulgaris,
PT   or for stimulating an immune response specific for a P. acnes protein.
XX
PS   Example 1; SEQ ID NO 10359; 1481pp; English.
XX
CC   The invention relates to an isolated polynucleotide (ACF64435-ACF64733)
CC   encoding a Propionibacterium acnes protein. The invention also relates to
CC   polypeptides encoded by the polynucleotides (ABM35624-ABM64536) and to
CC   immunogenic fragments of P. acnes polypeptides. The invention
CC   additionally encompasses expression vectors and host cells comprising a
CC   polynucleotide of the invention; antibodies against polypeptides of the
CC   invention; fusion proteins comprising a polypeptide of the invention; a
CC   method for stimulating an immune response specific for a P. acnes
CC   polypeptide and an isolated T cell population comprising T cells prepared
CC   via this method; a vaccine composition (comprising P. acnes polypeptides,
CC   polynucleotides, antibodies, fusion proteins, T cell populations, or
CC   antigen-presenting cells that express the polypeptide); a method and kit
CC   for detecting or determining the presence or absence of P. acnes in a
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CC   patient; and a method for inhibiting the development of P. acnes in a
CC   patient. The P. acnes polypeptides, polynucleotides, antibodies, fusion
CC   proteins, T cell populations or antigen-presenting cells that express the
CC   polypeptides are useful for diagnosing, preventing or treating acne
CC   vulgaris, or for stimulating an immune response specific for a P. acnes
CC   protein. The polynucleotides can also be used as probes or primers for
CC   nucleic acid hybridisation. The vaccine composition is useful for the
CC   stimulation of an immune response against P. acnes, or for treating acne,
CC   and the kit is useful for performing a diagnostic assay. The present
CC   sequence represents a polypeptide predicted to be encoded by an ORF (open
CC   reading frame) contained within the P. acnes polynucleotides of the
CC   invention. Note: The sequence data for this patent did not form part of
CC   the printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 161 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 161;
  Best Local Similarity   50.0%;  Pred. No. 3.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         72 SQGGVPHI 79


RESULT 68
ABR41393
ID   ABR41393 standard; protein; 162 AA.
XX
AC   ABR41393;
XX
DT   02-JUN-2003  (first entry)
XX
DE   Human DITHP zinc finger transcriptional regulator.
XX
KW   Human; dithp; diagnostic and therapeutic polynucleotide; diagnosis;
KW   cancer; cell proliferative disorder; autoimmune disorder;
KW   inflammatory disorder; infection; hormonal disorder; metabolic disorder;
KW   neurological disorder; gastrointestinal disorder; transport disorder;
KW   connective tissue disorder; drug screening; proteome analysis;
KW   gene therapy; antisense therapy; genotyping; transgenic animal; knock in;
KW   disease model; toxicological testing; transcript imaging; zinc finger;
KW   transcriptional regulator.
XX
OS   Homo sapiens.
XX
PN   WO200297031-A2.
XX
PD   05-DEC-2002.
XX
PF   27-MAR-2002; 2002WO-US010056.
XX
PR   28-MAR-2001; 2001US-0279619P.
PR   29-MAR-2001; 2001US-0280067P.
PR   29-MAR-2001; 2001US-0280068P.
PR   16-MAY-2001; 2001US-0291280P.
PR   17-MAY-2001; 2001US-0291829P.
PR   17-MAY-2001; 2001US-0291849P.
PR   19-JUN-2001; 2001US-0299428P.
PR   20-JUN-2001; 2001US-0299776P.
PR   20-JUN-2001; 2001US-0300001P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Daffo A,  Jones AL,  Tran AB,  Dahl CR,  Gietzen D,  Chinn J;
PI   Dufour GE,  Hillman JL,  Yu JY,  Tuason O,  Yap PE,  Amshey SR;
PI   Daughtery SC,  Dam TC,  Liu TF,  Nguyen DA,  Kleefeld Y,  Gerstin EH;
PI   Peralta CH,  David MH,  Lewis SA,  Chen AJ,  Panzer SR,  Harris B;
PI   Flores V,  Marwaha R,  Lo A,  Lan RY,  Urashka ME;
XX
DR   WPI; 2003-129518/12.
DR   N-PSDB; ACC46333.
XX
PT   Novel human diagnostic and therapeutic polypeptide useful for identifying
PT   test compound which specifically binds to a polypeptide encoded by human
PT   diagnostic and therapeutic polynucleotide, and to induce antibodies.
XX
PS   Claim 27; SEQ ID NO 928; 591pp; English.
XX
CC   The invention relates to novel human diagnostic and therapeutic
CC   polynucleotides designated dithp (ACC46080-ACC46749) and to their encoded
CC   proteins (DITHP; ABR41136-ABR41812). The invention also relates to
CC   polynucleotide sequences at least 90% identical to the dithp cDNA
CC   sequences of the invention; recombinant vectors, host cells and
CC   transgenic organisms comprising a dithp nucleic acid sequence; the
CC   recombinant production of DITHP proteins; antibodies specific for DITHP
CC   proteins; microarrays comprising dithp nucleic acid sequences; methods of
CC   detecting dithp nucleotide and protein sequences; methods of screening
CC   for compounds which specifically bind a DITHP protein; and methods of
CC   assessing the toxicity of test compounds using a dithp hybridisation
CC   probe. Dithp nucleic acid sequences and DITHP proteins may be used in the
CC   diagnosis of a wide variety of conditions including cancer and other cell
CC   proliferative disorders; autoimmune or inflammatory disorders; bacterial,
CC   viral, fungal or parasitic infections; hormonal disorders; metabolic
CC   disorders; neurological disorders; gastrointestinal disorders; transport
CC   disorders; and connective tissue disorders. They may also be used to
CC   screen for modulators of protein activity or gene expression. DITHP
CC   proteins can additionally be used in analysis of the proteome of a tissue
CC   or cell type and to induce antibodies. The dithp nucleic acids are
CC   additionally useful in somatic or germline gene therapy of the disorders
CC   mentioned above, as a source of antisense sequences, as a source of
CC   probes and primers, in genotyping and identification of individuals, in
CC   the generation of transgenic animal models of human disease or knock in
CC   humanised animals, in toxicological testing, and in transcript imaging.
CC   The present sequence represents a DITHP protein which has zinc finger-
CC   type transcriptional regulator activity. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 162 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 162;
  Best Local Similarity   50.0%;  Pred. No. 3.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        109 KQEEVLHI 116


RESULT 69
AAM86157
ID   AAM86157 standard; protein; 163 AA.
XX
AC   AAM86157;
XX
DT   07-NOV-2001  (first entry)
XX
DE   Human immune/haematopoietic antigen SEQ ID NO:13750.
XX
KW   Human; immune; haematopoietic; immune/haematopoietic antigen; cancer;
KW   cytostatic; gene therapy; vaccine; metastasis.
XX
OS   Homo sapiens.
XX
PN   WO200157182-A2.
XX
PD   09-AUG-2001.
XX
PF   17-JAN-2001; 2001WO-US001354.
XX
PR   31-JAN-2000; 2000US-0179065P.
PR   04-FEB-2000; 2000US-0180628P.
PR   24-FEB-2000; 2000US-0184664P.
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PR 02-MAR-2000; 2000US-0186350P.
PR 16-MAR-2000; 2000US-0189874P.
PR 17-MAR-2000; 2000US-0190076P.
PR 18-APR-2000; 2000US-0198123P.
PR 19-MAY-2000; 2000US-0205515P.
PR 07-JUN-2000; 2000US-0209467P.
PR 28-JUN-2000; 2000US-0214886P.
PR 30-JUN-2000; 2000US-0215135P.
PR 07-JUL-2000; 2000US-0216647P.
PR 07-JUL-2000; 2000US-0216880P.
PR 11-JUL-2000; 2000US-0217487P.
PR 11-JUL-2000; 2000US-0217496P.
PR 14-JUL-2000; 2000US-0218290P.
PR 26-JUL-2000; 2000US-0220963P.
PR 26-JUL-2000; 2000US-0220964P.
PR 14-AUG-2000; 2000US-0224518P.
PR 14-AUG-2000; 2000US-0224519P.
PR 14-AUG-2000; 2000US-0225213P.
PR 14-AUG-2000; 2000US-0225214P.
PR 14-AUG-2000; 2000US-0225266P.
PR 14-AUG-2000; 2000US-0225267P.
PR 14-AUG-2000; 2000US-0225268P.
PR 14-AUG-2000; 2000US-0225270P.
PR 14-AUG-2000; 2000US-0225447P.
PR 14-AUG-2000; 2000US-0225757P.
PR 14-AUG-2000; 2000US-0225758P.
PR 14-AUG-2000; 2000US-0225759P.
PR 18-AUG-2000; 2000US-0226279P.
PR 22-AUG-2000; 2000US-0226681P.
PR 22-AUG-2000; 2000US-0226868P.
PR 22-AUG-2000; 2000US-0227182P.
PR 23-AUG-2000; 2000US-0227009P.
PR 30-AUG-2000; 2000US-0228924P.
PR 01-SEP-2000; 2000US-0229287P.
PR 01-SEP-2000; 2000US-0229343P.
PR 01-SEP-2000; 2000US-0229344P.
PR 01-SEP-2000; 2000US-0229345P.
PR 05-SEP-2000; 2000US-0229509P.
PR 05-SEP-2000; 2000US-0229513P.
PR 06-SEP-2000; 2000US-0230437P.
PR 06-SEP-2000; 2000US-0230438P.
PR 08-SEP-2000; 2000US-0231242P.
PR 08-SEP-2000; 2000US-0231243P.
PR 08-SEP-2000; 2000US-0231244P.
PR 08-SEP-2000; 2000US-0231413P.
PR 08-SEP-2000; 2000US-0231414P.
PR 08-SEP-2000; 2000US-0232080P.
PR 08-SEP-2000; 2000US-0232081P.
PR 12-SEP-2000; 2000US-0231968P.
PR 14-SEP-2000; 2000US-0232397P.
PR 14-SEP-2000; 2000US-0232398P.
PR 14-SEP-2000; 2000US-0232399P.
PR 14-SEP-2000; 2000US-0232400P.
PR 14-SEP-2000; 2000US-0232401P.
PR 14-SEP-2000; 2000US-0233063P.
PR 14-SEP-2000; 2000US-0233064P.
PR 14-SEP-2000; 2000US-0233065P.
PR 21-SEP-2000; 2000US-0234223P.
PR 21-SEP-2000; 2000US-0234274P.
PR 25-SEP-2000; 2000US-0234997P.
PR 25-SEP-2000; 2000US-0234998P.
PR 26-SEP-2000; 2000US-0235484P.
PR 27-SEP-2000; 2000US-0235834P.
PR 27-SEP-2000; 2000US-0235836P.
PR 29-SEP-2000; 2000US-0236327P.
PR 29-SEP-2000; 2000US-0236367P.
PR 29-SEP-2000; 2000US-0236368P.
PR 29-SEP-2000; 2000US-0236369P.
PR 29-SEP-2000; 2000US-0236370P.
PR 02-OCT-2000; 2000US-0236802P.
PR 02-OCT-2000; 2000US-0237037P.
PR 02-OCT-2000; 2000US-0237038P.
PR 02-OCT-2000; 2000US-0237039P.
PR 02-OCT-2000; 2000US-0237040P.
PR 13-OCT-2000; 2000US-0239935P.
PR 13-OCT-2000; 2000US-0239937P.
PR 20-OCT-2000; 2000US-0240960P.
PR 20-OCT-2000; 2000US-0241221P.
PR 20-OCT-2000; 2000US-0241785P.
PR 20-OCT-2000; 2000US-0241786P.
PR 20-OCT-2000; 2000US-0241787P.
PR 20-OCT-2000; 2000US-0241808P.
PR 20-OCT-2000; 2000US-0241809P.
PR 20-OCT-2000; 2000US-0241826P.
PR 01-NOV-2000; 2000US-0244617P.
PR 08-NOV-2000; 2000US-0246474P.
PR 08-NOV-2000; 2000US-0246475P.
PR 08-NOV-2000; 2000US-0246476P.
PR 08-NOV-2000; 2000US-0246477P.
PR 08-NOV-2000; 2000US-0246478P.
PR 08-NOV-2000; 2000US-0246523P.
PR 08-NOV-2000; 2000US-0246524P.
PR 08-NOV-2000; 2000US-0246525P.
PR 08-NOV-2000; 2000US-0246526P.
PR 08-NOV-2000; 2000US-0246527P.
PR 08-NOV-2000; 2000US-0246528P.
PR 08-NOV-2000; 2000US-0246532P.
PR 08-NOV-2000; 2000US-0246609P.
PR 08-NOV-2000; 2000US-0246610P.
PR 08-NOV-2000; 2000US-0246611P.
PR 08-NOV-2000; 2000US-0246613P.
PR 17-NOV-2000; 2000US-0249207P.
PR 17-NOV-2000; 2000US-0249208P.
PR 17-NOV-2000; 2000US-0249209P.
PR 17-NOV-2000; 2000US-0249210P.
PR 17-NOV-2000; 2000US-0249211P.
PR 17-NOV-2000; 2000US-0249212P.
PR 17-NOV-2000; 2000US-0249213P.
PR 17-NOV-2000; 2000US-0249214P.
PR 17-NOV-2000; 2000US-0249215P.
PR 17-NOV-2000; 2000US-0249216P.
PR 17-NOV-2000; 2000US-0249217P.
PR 17-NOV-2000; 2000US-0249218P.
PR 17-NOV-2000; 2000US-0249244P.
PR 17-NOV-2000; 2000US-0249245P.
PR 17-NOV-2000; 2000US-0249264P.
PR 17-NOV-2000; 2000US-0249265P.
PR 17-NOV-2000; 2000US-0249297P.
PR 17-NOV-2000; 2000US-0249299P.
PR 17-NOV-2000; 2000US-0249300P.
PR 01-DEC-2000; 2000US-0250160P.
PR 01-DEC-2000; 2000US-0250391P.
PR 05-DEC-2000; 2000US-0251030P.
PR 05-DEC-2000; 2000US-0251988P.
PR 05-DEC-2000; 2000US-0256719P.
PR 06-DEC-2000; 2000US-0251479P.
PR 08-DEC-2000; 2000US-0251856P.
PR 08-DEC-2000; 2000US-0251868P.
PR 08-DEC-2000; 2000US-0251869P.
PR 08-DEC-2000; 2000US-0251989P.
PR 08-DEC-2000; 2000US-0251990P.
PR 11-DEC-2000; 2000US-0254097P.
PR 05-JAN-2001; 2001US-0259678P.
XX
PA (HUMA-) HUMAN GENOME SCI INC.
XX
PI Rosen CA, Barash SC, Ruben SM;
XX
DR WPI; 2001-483426/52.
DR N-PSDB; AAK58938.
XX
PT Nucleic acids encoding human immune/hematopoietic antigen polypeptides,
PT useful for preventing, diagnosing and/or treating cancers and metastasis.
XX
PS Claim 11; SEQ ID NO 13750; 3071pp + Sequence Listing; English.
XX

```
CC   AAK54951 to AAK64702 encode the human immune/haematopoietic antigen (I)
CC   amino acid sequences given in AAM82170 to AAM91921. (I) have cytostatic
CC   activity, and can be used in gene therapy and vaccine production. (I)
CC   proteins and polynucleotides may be used in the prevention, diagnosis and
CC   treatment of diseases associated with inappropriate (I) expression. For
CC   example, they may be used to treat disorders associated with decreased
CC   expression by rectifying mutations or deletions in a patient's genome
CC   that affect the activity of (I) by expressing inactive proteins or to
CC   supplement the patients own production of (I). Additionally, (I)
CC   polynucleotides may be used to produce the secreted (I), by inserting the
CC   nucleic acids into a host cell and culturing the cell to express the
CC   protein. (I) proteins and polynucleotides may be used to prevent,
CC   diagnose and treat immune/haematopoietic-related diseases, especially
CC   cancers and cancer metastases of haematopoietic-derived cells. AAK64703
CC   to AAK87694 represent human immune/haematopoietic antigen genomic
CC   sequences from the present invention. AAK54942 to AAK54950 and AAM82169
CC   represent sequences used in the exemplification of the present invention
XX
SQ   Sequence 163 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 163;
  Best Local Similarity   50.0%;  Pred. No. 3.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         15 GQHLVTHI 22


RESULT 70
AAW78156
ID   AAW78156 standard; protein; 164 AA.
XX
AC   AAW78156;
XX
DT   13-APR-1999  (first entry)
XX
DE   Human secreted protein encoded by gene 31 clone HTLAV68.
XX
KW   Human; secreted protein; fusion protein; gene therapy; protein therapy;
KW   diagnosis; tissue; cancer; tumour; neurodegenerative disorder; leukaemia;
KW   developmental abnormality; foetal deficiency; blood; allergy; renal;
KW   immune system; asthma; lymphocytic disease; brain; hepatic; lymphoma;
KW   inflammation; ischaemic shock; Alzheimer's disease; restenosis; AIDS;
KW   cognitive disorder; schizophrenia; prostate; obesity; osteoclast; thymus;
KW   osteoporosis; arthritis; testis; lung; thyroiditis; thyroid; digestion;
KW   endocrine; metabolism; regulation; malabsorption; gastritis; neoplasm.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 51
FT                   /label= unknown
FT   Misc-difference 82
FT                   /label= unknown
FT   Misc-difference 89. .91
FT                   /label= unknown
FT   Misc-difference 163. .164
FT                   /label= unknown
XX
PN   WO9856804-A1.
XX
PD   17-DEC-1998.
XX
PF   11-JUN-1998;   98WO-US012125.
XX
PR   13-JUN-1997;   97US-0049547P.
PR   13-JUN-1997;   97US-0049548P.
PR   13-JUN-1997;   97US-0049549P.
PR   13-JUN-1997;   97US-0049550P.
PR   13-JUN-1997;   97US-0049566P.
PR   13-JUN-1997;   97US-0049606P.
PR   13-JUN-1997;   97US-0049607P.
PR   13-JUN-1997;   97US-0049608P.
PR   13-JUN-1997;   97US-0049609P.
PR   13-JUN-1997;   97US-0049610P.
PR   13-JUN-1997;   97US-0049611P.
PR   13-JUN-1997;   97US-0050901P.
PR   13-JUN-1997;   97US-0052989P.
PR   08-JUL-1997;   97US-0051919P.
PR   18-AUG-1997;   97US-0055984P.
PR   12-SEP-1997;   97US-0058665P.
PR   12-SEP-1997;   97US-0058668P.
PR   12-SEP-1997;   97US-0058669P.
PR   12-SEP-1997;   97US-0058750P.
PR   12-SEP-1997;   97US-0058971P.
PR   12-SEP-1997;   97US-0058972P.
PR   12-SEP-1997;   97US-0058975P.
PR   02-OCT-1997;   97US-0060834P.
PR   02-OCT-1997;   97US-0060841P.
PR   02-OCT-1997;   97US-0060844P.
PR   02-OCT-1997;   97US-0060865P.
PR   02-OCT-1997;   97US-0061059P.
PR   02-OCT-1997;   97US-0061060P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Moore PA,  Shi Y,  Rosen CA,  Ruben SM,  Lafleur DW,  Olsen HS;
PI   Ebner R,  Brewer LA,  Young P,  Greene JM,  Ferrie AM,  Yu G,  Ni J;
PI   Feng P;
XX
DR   WPI; 1999-080881/07.
DR   N-PSDB; AAX04341.
XX
PT   New isolated human genes and the secreted polypeptides they encode -
PT   useful for diagnosis and treatment of e.g. cancers, neurological
PT   disorders, immune diseases, inflammation or blood disorders.
XX
PS   Claim 11; Page 279-280; 380pp; English.
XX
CC   This sequence represents a secreted human protein encoded by the gene
CC   clone detailed in the descriptor line. The gene can be used to generate
CC   fusion proteins by linking to the gene to a human immunoglobulin Fc
CC   portion (e.g. AAX04302) for increasing the stability of the fused protein
CC   as compared to the human protein only. The invention relates to 86 novel
CC   genes and their fragments (nucleic acid sequences: AAX04311-X04410; amino
CC   acid sequences AAW78126-W78225) which are useful for preventing, treating
CC   or ameliorating medical conditions e.g. by protein or gene therapy. Also,
CC   pathological conditions can be diagnosed by determining the amount of the
CC   new polypeptides in a sample or by determining the presence of mutations
CC   in the new polynucleotides. Specific uses are described for each of the
CC   86 polynucleotides, based on which tissues they are most highly expressed
CC   in (see AAX04311 for described uses)
XX
SQ   Sequence 164 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 164;
  Best Local Similarity   50.0%;  Pred. No. 3.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         58 TQSSVTHI 65


RESULT 71
ABP64903
ID   ABP64903 standard; protein; 169 AA.
XX
AC   ABP64903;
XX
DT   25-FEB-2003  (first entry)
XX
DE   Human protein SEQ ID 563.
XX
KW   Human; expressed sequence tag; EST; haematopoietic disorder;
```

KW central nervous system disease; viral infection;
KW peripheral nervous system disease; non-healing wound; infectious disease;
KW immune deficiency; immune disorder; bacterial infection; allergy; cancer;
KW fungal infection; autoimmune disorder; coagulation disorder; nootropic;
KW antiallergic; antiinflammatory; immunosuppressive; neuroprotective;
KW cytostatic; haemostatic; virucide; antibacterial; fungicide;
KW immunostimulant; cerebroprotective.
XX
OS Homo sapiens.
XX
PN WO200259260-A2.
XX
PD 01-AUG-2002.
XX
PF 16-NOV-2001; 2001WO-US042950.
XX
PR 17-NOV-2000; 2000US-00714936.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Goodrich RW, Liu C, Zhou P, Asundi V, Zhang J, Zhao QA;
PI Ren F, Xue AJ, Yang Y, Wehrman T, Drmanac RT;
XX
DR WPI; 2002-590824/63.
DR N-PSDB; ABQ99489.
XX
PT New isolated polynucleotide, useful in research, diagnostic or
PT therapeutic methods, e.g. preventing or treating disorders involving
PT aberrant protein expression or biological activity.
XX
PS Claim 20; SEQ ID NO 563; 394pp; English.
XX
CC The present invention relates to novel human coding sequences (ABQ99268-
CC ABQ99608) and proteins (ABP64682-ABP65022). The sequences are useful in
CC therapeutic, diagnostic and research methods. The polynucleotides may be
CC used in the field of molecular biology as hybridisation probes, primers
CC for PCR, for chromosome and gene mapping, for the recombinant production
CC of protein, or in generation of anti-sense DNA or RNA. The
CC polynucleotides are useful in diagnostics as expressed sequence tags
CC (ESTs) for identifying expressed genes or for physical mapping of the
CC human genome. The proteins may be used as molecular weight markers, or as
CC nutritional sources or supplements. The proteins may be used to maintain
CC and expand cell population in a totipotential or pluripotential state
CC useful for re-engineering damaged or diseased tissues, transplantation,
CC manufacture of bio-pharmaceuticals or the development of bio-sensors. The
CC polynucleotides and proteins are useful for preventing, treating or
CC ameliorating disorders involving aberrant protein expression or
CC biological activity, e.g. haematopoietic disorders, central/peripheral
CC nervous system diseases, mechanical and traumatic disorders, non-healing
CC wounds, immune deficiencies and disorders, infectious diseases caused by
CC viral, bacterial or fungal infection, autoimmune disorders, allergic
CC reactions and conditions, coagulation disorders, or cancer. The
CC polynucleotide sequences of the invention were assembled from ESTs
CC isolated mainly by sequencing by hybridisation, and in some cases,
CC sequences obtained from one or more public databases. Note: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 169 AA;

Query Match 100.0%; Score 25; DB 5; Length 169;
Best Local Similarity 50.0%; Pred. No. 3.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 86 CQEEVSHI 93

RESULT 72
AAM47374
ID AAM47374 standard; protein; 170 AA.
XX
AC AAM47374;
XX
DT 04-MAR-2002 (first entry)
XX
DE Rat pheromone receptor F14 protein fragment SEQ ID NO: 42.
XX
KW Rat; pheromone receptor; aroma detection; perfume analysis;
KW toxic substance detection; odour trapping.
XX
OS Rattus norvegicus.
XX
PN WO200183549-A2.
XX
PD 08-NOV-2001.
XX
PF 03-MAY-2001; 2001WO-FR001354.
XX
PR 03-MAY-2000; 2000FR-00005651.
XX
PA (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Clement J, Renucci M, Tirard A, Marcet B;
XX
DR WPI; 2002-049336/06.
DR N-PSDB; ABA05709.
XX
PT New pheromone receptors from rat, useful in biosensors for e.g. detecting
PT aromas and toxins, also related nucleic acids and antibodies.
XX
PS Disclosure; Page 45; 62pp; French.
XX
CC The present invention provides the protein and coding sequences of a
CC number of rat pheromone receptors. These receptors are useful in
CC biosensors for detecting aromas and for quality control in food
CC processing, for analysis and comparison of perfumes, for detecting toxic
CC substances and trapping odours, also for identifying volatile compounds
CC in general, monitoring either populations of predators or feeding,
CC detecting drugs or pollutants, identifying humans, identifying compounds
CC that induce appetite, flight and attraction, and to accelerate or reduce
CC fertility. The present sequence is a rat pheromone described in the
CC exemplification of the invention
XX
SQ Sequence 170 AA;

Query Match 100.0%; Score 25; DB 5; Length 170;
Best Local Similarity 50.0%; Pred. No. 3.5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 155 IQLLVVHI 162

RESULT 73
AAM47385
ID AAM47385 standard; protein; 170 AA.
XX
AC AAM47385;
XX
DT 04-MAR-2002 (first entry)
XX
DE Rat pheromone receptor F30 protein fragment SEQ ID NO: 53.
XX
KW Rat; pheromone receptor; aroma detection; perfume analysis;
KW toxic substance detection; odour trapping.
XX
OS Rattus norvegicus.
XX
PN WO200183549-A2.
XX
PD 08-NOV-2001.
XX

```
PF   03-MAY-2001; 2001WO-FR001354.
XX
PR   03-MAY-2000; 2000FR-00005651.
XX
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Clement J,  Renucci M,  Tirard A,  Marcet B;
XX
DR   WPI; 2002-049336/06.
DR   N-PSDB; ABA05720.
XX
PT   New pheromone receptors from rat, useful in biosensors for e.g. detecting
PT   aromas and toxins, also related nucleic acids and antibodies.
XX
PS   Disclosure; Page 53; 62pp; French.
XX
CC   The present invention provides the protein and coding sequences of a
CC   number of rat pheromone receptors. These receptors are useful in
CC   biosensors for detecting aromas and for quality control in food
CC   processing, for analysis and comparison of perfumes, for detecting toxic
CC   substances and trapping odours, also for identifying volatile compounds
CC   in general, monitoring either populations of predators or feeding,
CC   detecting drugs or pollutants, identifying humans, identifying compounds
CC   that induce appetite, flight and attraction, and to accelerate or reduce
CC   fertility. The present sequence is a rat pheromone described in the
CC   exemplification of the invention
XX
SQ   Sequence 170 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 170;
  Best Local Similarity   50.0%;  Pred. No. 3.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        155 IQIFVSHI 162


RESULT 74
AAM47391
ID   AAM47391 standard; protein; 170 AA.
XX
AC   AAM47391;
XX
DT   04-MAR-2002  (first entry)
XX
DE   Rat pheromone receptor M2 protein fragment SEQ ID NO: 59.
XX
KW   Rat; pheromone receptor; aroma detection; perfume analysis;
KW   toxic substance detection; odour trapping.
XX
OS   Rattus norvegicus.
XX
PN   WO200183549-A2.
XX
PD   08-NOV-2001.
XX
PF   03-MAY-2001; 2001WO-FR001354.
XX
PR   03-MAY-2000; 2000FR-00005651.
XX
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Clement J,  Renucci M,  Tirard A,  Marcet B;
XX
DR   WPI; 2002-049336/06.
DR   N-PSDB; ABA05726.
XX
PT   New pheromone receptors from rat, useful in biosensors for e.g. detecting
PT   aromas and toxins, also related nucleic acids and antibodies.
XX
PS   Disclosure; Page 57; 62pp; French.
XX
CC   The present invention provides the protein and coding sequences of a
CC   number of rat pheromone receptors. These receptors are useful in
CC   biosensors for detecting aromas and for quality control in food
CC   processing, for analysis and comparison of perfumes, for detecting toxic
CC   substances and trapping odours, also for identifying volatile compounds
CC   in general, monitoring either populations of predators or feeding,
CC   detecting drugs or pollutants, identifying humans, identifying compounds
CC   that induce appetite, flight and attraction, and to accelerate or reduce
CC   fertility. The present sequence is a rat pheromone described in the
CC   exemplification of the invention
XX
SQ   Sequence 170 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 170;
  Best Local Similarity   50.0%;  Pred. No. 3.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        155 IQIFVSHI 162


RESULT 75
AAM47392
ID   AAM47392 standard; protein; 170 AA.
XX
AC   AAM47392;
XX
DT   04-MAR-2002  (first entry)
XX
DE   Rat pheromone receptor M6 protein fragment SEQ ID NO: 60.
XX
KW   Rat; pheromone receptor; aroma detection; perfume analysis;
KW   toxic substance detection; odour trapping.
XX
OS   Rattus norvegicus.
XX
PN   WO200183549-A2.
XX
PD   08-NOV-2001.
XX
PF   03-MAY-2001; 2001WO-FR001354.
XX
PR   03-MAY-2000; 2000FR-00005651.
XX
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Clement J,  Renucci M,  Tirard A,  Marcet B;
XX
DR   WPI; 2002-049336/06.
DR   N-PSDB; ABA05727.
XX
PT   New pheromone receptors from rat, useful in biosensors for e.g. detecting
PT   aromas and toxins, also related nucleic acids and antibodies.
XX
PS   Disclosure; Page 57-58; 62pp; French.
XX
CC   The present invention provides the protein and coding sequences of a
CC   number of rat pheromone receptors. These receptors are useful in
CC   biosensors for detecting aromas and for quality control in food
CC   processing, for analysis and comparison of perfumes, for detecting toxic
CC   substances and trapping odours, also for identifying volatile compounds
CC   in general, monitoring either populations of predators or feeding,
CC   detecting drugs or pollutants, identifying humans, identifying compounds
CC   that induce appetite, flight and attraction, and to accelerate or reduce
CC   fertility. The present sequence is a rat pheromone described in the
CC   exemplification of the invention
XX
SQ   Sequence 170 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 170;
  Best Local Similarity   50.0%;  Pred. No. 3.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;
```

```
Qy          1 XQXXVXHI 8
              :|::|:||
Db        155 IQIFVSHI 162
```

RESULT 76
ABG07209
ID ABG07209 standard; protein; 172 AA.
XX
AC ABG07209;
XX
DT 13-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #7200.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS71396.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
PS Claim 20; SEQ ID NO 37568; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 172 AA;

```
  Query Match             100.0%;  Score 25;  DB 4;  Length 172;
  Best Local Similarity   50.0%;  Pred. No. 3.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         61 IQTYVEHI 68
```

RESULT 77
ABG18197
ID ABG18197 standard; protein; 173 AA.
XX
AC ABG18197;
XX
DT 18-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #18188.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS82384.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations
PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
PS Claim 20; SEQ ID NO 48556; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 173 AA;

```
  Query Match             100.0%;  Score 25;  DB 4;  Length 173;
  Best Local Similarity   50.0%;  Pred. No. 3.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         53 KQELVRHI 60
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RESULT 78
ABM69901
ID   ABM69901 standard; protein; 181 AA.
XX
AC   ABM69901;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Photorhabdus luminescens protein sequence #2998.
XX
KW   Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
KW   detection; food; gene expression; plant; animal; microorganism; toxin;
KW   antibiotic; biopesticide; virulence factor; disease model; plague;
KW   whooping cough.
XX
OS   Photorhabdus luminescens.
XX
PN   WO200294867-A2.
XX
PD   28-NOV-2002.
XX
PF   07-FEB-2002; 2002WO-IB003040.
XX
PR   07-FEB-2001; 2001FR-00001659.
XX
PA   (INSP ) INST PASTEUR.
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Duchaud E,  Taourit S,  Glaser P,  Frangeul L,  Kunst F,  Danchin A;
PI   Buchrieser C;
XX
DR   WPI; 2003-148459/14.
XX
PT   Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
PT   useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
PS   Claim 2; SEQ ID NO 2998; 1205pp; French.
XX
CC   The invention relates to the isolation of genes and their encoded
CC   proteins from Photorhabdus luminescens. The isolated sequences are
CC   sources of probes and primers for detecting the genome of P. luminescens
CC   and related species; to study polymorphisms; for gene analysis and for
CC   detection/amplification of the genes. Antibodies (Ab) raised against the
CC   polypeptides encoded by the genes are used for detection/identification
CC   of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
CC   carry a gene-containing vector are used to select compounds that
CC   modulate, regulate, induce or inhibit expression of the genes in plants,
CC   animals or microorganisms other than P. luminescens and are able to alter
CC   response or sensitivity to toxins and antibiotics produced by P.
CC   luminescens. Cells transformed to express the genes are useful for
CC   recombinant production of the proteins, particularly toxins and
CC   antibacterials useful as insecticides, bactericides and fungicides. The
CC   genes, proteins, vectors containing the genes and Ab are also useful
CC   therapeutically (to treat microbial infection by bacteria or fungi that
CC   are sensitive to P. luminescens-encoded toxins or antibiotics) and as
CC   biopesticides. Other uses of the genes and the proteins are as virulence
CC   factors and for identifying targets of human diseases for which P.
CC   luminescens is a model (particularly plague and whooping cough). This
CC   sequence represents one of the isolated P. luminescens proteins
XX
SQ   Sequence 181 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 181;
  Best Local Similarity   50.0%;  Pred. No. 3.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
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Db         33 RQKTVKHI 40
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RESULT 79
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ID   AAR68871 standard; protein; 183 AA.
XX
AC   AAR68871;
XX
DT   04-SEP-1995  (first entry)
XX
DE   Hepatitis B virus polypeptide clone A6.
XX
KW   Hepatitis B virus; HBV; polypeptide A6; diagnosis and detection.
XX
OS   Hepatitis B virus.
XX
PN   JP06321991-A.
XX
PD   22-NOV-1994.
XX
PF   14-MAY-1993;   93JP-00113136.
XX
PR   14-MAY-1993;   93JP-00113136.
XX
PA   (MITU ) MITSUBISHI KASEI CORP.
XX
DR   WPI; 1995-041293/06.
DR   N-PSDB; AAQ81566.
XX
PT   Polypeptide derived from type B hepatitis virus and gene to code it -
PT   used in diagnosis of type B hepatitis virus.
XX
PS   Claim 1; Page 11-12; 13pp; Japanese.
XX
CC   AAQ81566 encodes AAR68871 the hepatitis B virus (HBV) polypeptide A6, the
CC   polypeptide or its fragments can be used in the diagnosis and detection
CC   of HBV
XX
SQ   Sequence 183 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 183;
  Best Local Similarity   50.0%;  Pred. No. 3.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         98 RQLIVVHI 105
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RESULT 80
AAG37616
ID   AAG37616 standard; protein; 191 AA.
XX
AC   AAG37616;
XX
DT   18-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 46280.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
XX
PF   25-FEB-2000; 2000EP-00301439.
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Best Local Similarity 50.0%; Pred. No. 4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Db 124 NQVLVQHI 131

RESULT 81
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ID AAG13674 standard; protein; 191 AA.
XX
AC AAG13674;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 13256.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
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PF 25-FEB-2000; 2000EP-00301439.
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Query Match 100.0%; Score 25; DB 3; Length 191;
Best Local Similarity 50.0%; Pred. No. 4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Db 124 NQVLVQHI 131

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XX
AC ABP72267;
XX
DT 28-APR-2003 (first entry)
XX
DE Human cervical cancer 2 proto-oncogene encoded protein.
XX
KW Human cervical cancer 2; HCC-2; human; cervix cancer; oncogene;
KW diagnosis; cytostatic; gene therapy.
XX
OS Homo sapiens.
XX
PN WO2003002744-A1.
XX
PD 09-JAN-2003.
XX
PF 27-JUN-2002; 2002WO-KR001227.
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PR 28-JUN-2001; 2001KR-00037589.
XX
PA (KIMJ/) KIM J.
XX
PI Kim J;
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DR WPI; 2003-210277/20.
DR N-PSDB; ABZ58393.
XX
PT Human cervical cancer 2 proto-oncogene for diagnosing cancer.
XX
PS Claim 3; Page 23-24; 26pp; English.
XX
CC The present sequence is that of the protein encoded by novel human
CC cervical cancer 2 (HCC-2) proto-oncogene. HCC-2 is expressed in uterine
CC and cervical cancer tissues but not in normal cervical tissues. It is
CC over-expressed in leukaemia, lymphoma, skin, lung and colon cancers. HCC-
CC 2 proto-oncogene can be used in cancer diagnosis, in the construction of
CC transgenic animals and in antisense gene therapy. The protein can be used

```
CC   to produce an antibody useful as a diagnostic tool, and is also used in a
CC   claimed kit for diagnosis of cancer
XX
SQ   Sequence 193 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 193;
  Best Local Similarity   50.0%;  Pred. No. 4.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        139 KQKGVIHI 146


RESULT 83
AAY72167
ID   AAY72167 standard; protein; 194 AA.
XX
AC   AAY72167;
XX
DT   24-APR-2001  (first entry)
XX
DE   Human RNA metabolism protein (RMEP-7).
XX
KW   Human; RNA metabolism protein; RMEP; nootropic; neuroleptic; antiulcer;
KW   tranquilliser; antianaemic; antidiabetic; immunosuppressive; cytostatic;
KW   antiasthmatic; antiinflammatory; anti-HIV; human immunodeficiency virus;
KW   antiarthritic; antiarteriosclerotic; antiatherosclerotic; antiallergic;
KW   antirheumatoid; antiparkinsonian; antithyroid; nephrotrophic; antigout;
KW   thyromimetic; RMEP expression modulator; transgenic; spinal cord disease;
KW   nervous system disorder; Alzheimer's disease; therapy; gene therapy;
KW   neuromuscular disorder; hepatitis; cancer; cell proliferative disorder;
KW   peripheral nervous system disorder; cirrhosis; cranial nerve disorder;
KW   progressive neural autonomic nervous system disorder; Addison's disease;
KW   amyotrophic lateral sclerosis; autoimmune disorder; drug screening.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Region          85. .193
FT                   /note= "Ribosomal protein S11, signature sequence of RMEP
FT                   -7"
XX
PN   WO200078952-A2.
XX
PD   28-DEC-2000.
XX
PF   15-JUN-2000; 2000WO-US016644.
XX
PR   17-JUN-1999;   99US-0139922P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
PA   (BAUG/) BAUGHN M R.
XX
PI   Bandman O,  Yue H,  Lal P,  Tang YT,  Reddy R,  Azimzai Y;
XX
DR   WPI; 2001-102723/11.
DR   N-PSDB; AAD02350.
XX
PT   New human RNA metabolism proteins (RMEP), useful for diagnosing,
PT   treating, preventing nervous system, cell proliferative,
PT   autoimmune/inflammatory disorders associated with abnormal expression of
PT   RMEP.
XX
PS   Claim 1; Page 88-89; 103pp; English.
XX
CC   The present sequence is human RNA metabolism protein (RMEP-7) encoded by
CC   a cDNA (Clone ID 2641494) obtained from LUNGTUT08 cDNA library. Agonists
CC   and antagonists of RMEP cDNA are useful for treating diseases or
CC   conditions associated with altered expression of functional RMEP. RMEP
CC   sequence or their mammalian homologues are useful for creating 'knock
CC   out' or 'knock in' humanised animals or transgenic animals to model human
CC   disease. RMEP sequence is useful in the diagnosis, prevention and
CC   treatment of nervous system disorders e.g. Alzheimer's disease, Pick's
CC   disease, Huntington's disease, Parkinson's disease, amyotrophic lateral
CC   sclerosis, and other motor neuron disorders, progressive neural autonomic
CC   nervous system disorders, cranial nerve disorders, spinal cord diseases,
CC   muscular dystrophy and other neuromuscular disorders, peripheral nervous
CC   system disorders, mental disorders including anxiety and schizophrenia,
CC   amnesia etc, cell proliferative disorders e.g. actinic keratosis,
CC   arteriosclerosis, atherosclerosis, cirrhosis, hepatitis, mixed connective
CC   tissue disease (MCTD), cancers e.g. adenocarcinoma, leukemia, lymphoma,
CC   melanoma etc., and autoimmune/inflammatory disorders such as acquired
CC   immuno deficiency syndrome (AIDS), Addison's disease, allergies, anaemia,
CC   asthma, diabetes mellitus, rheumatoid arthritis, Grave's disease and
CC   autoimmune polyendocrinopathy-candidiasis-ectodermal dystrophy (APECED).
CC   RMEP cDNA is useful for somatic or germline gene therapy. RMEP sequence
CC   is useful several drug screening assays
XX
SQ   Sequence 194 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 194;
  Best Local Similarity   50.0%;  Pred. No. 4.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        140 KQKGVIHI 147


RESULT 84
ADE59099
ID   ADE59099 standard; protein; 194 AA.
XX
AC   ADE59099;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P82912, SEQ ID NO 4990.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P82912.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
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CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 194 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 194;
  Best Local Similarity   50.0%;  Pred. No. 4.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        140 KQKGVIHI 147


RESULT 85
ABB52791
ID   ABB52791 standard; protein; 195 AA.
XX
AC   ABB52791;
XX
DT   11-FEB-2002  (first entry)
XX
DE   Escherichia coli polypeptide SEQ ID NO 986.
XX
KW   Escherichia coli; B2/D+A-; antiinflammatory; antibacterial;
KW   immunosuppressive; extra-intestinal infection; phylogeny; meningitis;
KW   systemic infection; non-diarrhoeal infection; septicaemia;
KW   pyelonephritis; antibiotic resistance.
XX
OS   Escherichia coli.
XX
PN   WO200166572-A2.
XX
PD   13-SEP-2001.
XX
PF   12-MAR-2001; 2001WO-EP003445.
XX
PR   10-MAR-2000; 2000FR-00003145.
PR   02-FEB-2001; 2001FR-00001449.
XX
PA   (INRM ) INSERM INST NAT SANTE & RECH MEDICALE.
XX
PI   Bingen E,  Bonacorsi S,  Clermont O,  Nassif X,  Tinsley C;
XX
DR   WPI; 2001-550253/61.
XX
PT   A library of DNA fragments of Escherichia coli strains for the phylogenic
PT   determination of a given strain comprises polynucleotides of nature B2/D+
PT   A-.
XX
PS   Example 6; Fig 6; 646pp; English.
XX
CC   The invention relates to a library of DNA fragments of Escherichia coli
CC   strains comprising polynucleotides (ABA88577-ABA88729 and ABA89533) and
CC   encoded proteins (ABB52459-ABB52919 and ABB52954-ABB53094) of nature
CC   B2/D+A-. The polynucleotides have potential antiinflammatory,
CC   antibacterial and immunosuppressive activity as part of pharmaceutical
CC   compositions used to treat, palliate or prevent extra-intestinal E. coli
CC   infections. The polypeptides are useful for determining the phylogenic
CC   group of a given E. coli strain. These polypeptides can detect and treat
CC   an undesired development of E. coli, particularly an extra-intestinal
CC   infection that include systemic and non-diarrhoeal infections such as
CC   septicaemia, pyelonephritis and meningitis this is particularly
CC   advantageous as bacterial resistance is increasing with the more frequent
CC   use of broad spectrum antibiotics
XX
SQ   Sequence 195 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 195;
  Best Local Similarity   50.0%;  Pred. No. 4.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        175 NQRCVNHI 182


RESULT 86
ABB91436
ID   ABB91436 standard; protein; 195 AA.
XX
AC   ABB91436;
XX
DT   31-MAY-2002  (first entry)
XX
DE   Herbicidally active polypeptide SEQ ID NO 647.
XX
KW   Herbicidal; plant; agriculture; herbicide.
XX
OS   Arabidopsis thaliana.
XX
PN   WO200210210-A2.
XX
PD   07-FEB-2002.
XX
PF   28-AUG-2001; 2001WO-EP009892.
XX
PR   28-AUG-2001; 2001WO-EP009892.
XX
PA   (FARB ) BAYER AG.
XX
PI   Tietjen K,  Weidler M;
XX
DR   WPI; 2002-269010/31.
XX
PT   Identifying plant target proteins for herbicidally active compounds,
PT   comprising aligning and comparing nucleic acid or amino acid sequences
PT   from plant with nucleic acid or amino acid sequences from non-plant
PT   organisms.
XX
PS   Claim 5; SEQ ID NO 647; 261pp + Sequence Listing; English.
XX
CC   The invention relates to identifying target proteins (ABB90790-ABB94016)
CC   for herbicidally active compounds, comprising aligning and comparing
CC   nucleic acid or amino acid sequences from plant with nucleic acid or
CC   amino acid sequences from non-plant organisms using suitable search
CC   parameters, where plant sequences having an E-value greater by a factor
CC   of 3 than the E-value of most similar non-plant sequences are selected.
CC   The polypeptides or nucleic acids encoding them are useful for
CC   identifying modulators. The identified modulators are useful as
CC   herbicides
XX
SQ   Sequence 195 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 195;
  Best Local Similarity   50.0%;  Pred. No. 4.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;
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Qy          1 XQXXVXHI 8
              :|::|:||
Db        127 FQASVYHI 134


RESULT 87
AAG81948
ID   AAG81948 standard; protein; 198 AA.
XX
AC   AAG81948;
XX
DT   03-SEP-2001  (first entry)
XX
DE   S. epidermidis open reading frame protein sequence SEQ ID NO:990.
XX
KW   Staphylococcus epidermidis SR1 strain; infection; diagnosis; vaccination;
KW   endocarditis.
XX
OS   Staphylococcus epidermidis.
XX
PN   WO200134809-A2.
XX
PD   17-MAY-2001.
XX
PF   09-NOV-2000; 2000WO-US030782.
XX
PR   09-NOV-1999;   99US-0164258P.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Kimmerly WJ;
XX
DR   WPI; 2001-316495/33.
DR   N-PSDB; AAH52798.
XX
PT   Nucleic acids encoding polypeptides from Staphylococcus epidermidis,
PT   useful for vaccinating against infections, e.g. endocarditis.
XX
PS   Claim 18; Page 289; 2188pp; English.
XX
CC   AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
CC   (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
CC   and (II) can have antibacterial activity and therefore can be used in
CC   vaccination. The nucleic acids (I) may be used to produce the S.
CC   epidermidis polypeptides (II) via the production of vectors containing
CC   them which are used to produce hosts cells which express the
CC   polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
CC   used to vaccinate subjects and to raise antibodies against the bacteria.
CC   The polypeptides may also be used to assay for other inhibitors of their
CC   activity and therefore identify compounds that may be used for the
CC   treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
CC   AAH55090 represent specifically claimed S. epidermidis genomic DNA
CC   polynucleotide sequences from the present invention. AAH55091 to AAH55098
CC   represent oligonucleotide sequences and primers which are used in the
CC   exemplification of the present invention. N.B. The present invention
CC   specifically claims all the polynucleotide sequences given in the
CC   sequence listing of the present specification, however the sequence
CC   listing only goes up to SEQ ID NO:4454 so even though sequences are given
CC   in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
CC   for SEQ ID NO:4455 to 4464
XX
SQ   Sequence 198 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 198;
  Best Local Similarity   50.0%;  Pred. No. 4.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        139 AQYAVDHI 146


RESULT 88
AAB58855
ID   AAB58855 standard; protein; 200 AA.
XX
AC   AAB58855;
XX
DT   27-MAR-2001  (first entry)
XX
DE   Breast and ovarian cancer associated antigen protein sequence SEQ ID 563.
XX
KW   Human; breast cancer; ovarian cancer; cytostatic; immunosuppressive;
KW   nootropic; neurpprotective; antiviral; antiallergic; hepatotropic;
KW   antidiabetic; antiinflammatory; antiulcer; vulnerary; anticonvulsant;
KW   antibacterial; antifungal; antiparasitic; cardiant; immune disorder;
KW   Addison's disease; allergy; autoimmune haemolytic anaemia;
KW   autoimmune thyroiditis; diabetes mellitus; Crohn's disease;
KW   multiple sclerosis; rheumatoid arthritis; ulcerative colitis;
KW   cardiovascular disorder; wound healing; neurological disease.
XX
OS   Homo sapiens.
XX
PN   WO200055173-A1.
XX
PD   21-SEP-2000.
XX
PF   08-MAR-2000; 2000WO-US005881.
XX
PR   12-MAR-1999;   99US-0124270P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Rosen CA,  Ruben SM;
XX
DR   WPI; 2000-611515/58.
DR   N-PSDB; AAF21758.
XX
PT   New human breast and ovarian cancer associated gene sequences and the
PT   polypeptides encoded by these genes, useful in the prevention, treatment
PT   and diagnosis of cancer, immune disorders, cardiovascular disorders and
PT   neurological diseases.
XX
PS   Claim 11; Page 999; 1299pp; English.
XX
CC   Sequences AAF21614 - AAF22031 represent DNA sequences encoding human
CC   proteins AAB58711 - AAB59128. The DNA and protein sequences are
CC   associated with breast and ovarian cancer. Included in the invention are
CC   sequences AAF22032 - AAF22040 and AAB59129 which are used in the
CC   isolation and characterisation of the DNA and protein sequences of the
CC   invention. The breast and ovarian cancer associated DNA, protein, agonist
CC   or antagonist sequences exhibit cytostatic; immunosuppressive; nootropic;
CC   neuroprotective; antiviral; antiallergic; hepatotropic; antidiabetic;
CC   antiinflammatory; antiulcer; vulnerary; anticonvulsant; antibacterial;
CC   antifungal; antiparasitic and cardiant activity. The polynucleotide and
CC   protein sequences are used in the diagnosis of cancer, particularly
CC   breast and ovarian cancer. The nucleic acid sequences, proteins, agonists
CC   and agonists may also be used in the diagnosis, prevention and treatment
CC   of immune disorders e.g. Addison's disease, allergies, autoimmune
CC   haemolytic anaemia, autoimmune thyroiditis, diabetes mellitus, Crohn's
CC   disease, multiple sclerosis, rheumatoid arthritis and ulcerative colitis;
CC   cardiovascular disorders such as myocardial ischaemias; wound healing;
CC   neurological diseases such as cerebral anoxia and epilepsy; and
CC   infectious diseases
XX
SQ   Sequence 200 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 200;
  Best Local Similarity   50.0%;  Pred. No. 4.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        146 KQKGVIHI 153
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RESULT 89
ABP41624
ID   ABP41624 standard; protein; 200 AA.
XX
AC   ABP41624;
XX
DT   22-AUG-2002  (first entry)
XX
DE   Human ovarian antigen HAZAA64, SEQ ID NO:2756.
XX
KW   Human; ovarian antigen; ovary; ovarian; breast; cancer; tumour;
KW   ovarian cancer; breast cancer; tumour; reproductive system disorder;
KW   infertility; pregnancy disorder; anovulation; polycystic ovary syndrome;
KW   PCOS; ovarian cyst; dysmenorrhoea; endocrine disorder; infection;
KW   inflammatory condition; immune disorder; blood disorder;
KW   cardiovascular disorder; respiratory disorder; neurological disorder;
KW   gastrointestinal disorder; urinary system disorder; drug screening;
KW   gene therapy; chromosome mapping; forensic analysis;
KW   antibody preparation; cytostatic; immunomodulatory; neuroprotective;
KW   antiinflammatory; gynaecological; reproductive.
XX
OS   Homo sapiens.
XX
PN   WO200200677-A1.
XX
PD   03-JAN-2002.
XX
PF   07-JUN-2001; 2001WO-US018569.
XX
PR   07-JUN-2000; 2000US-0209467P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Birse CE,  Rosen CA;
XX
DR   WPI; 2002-147878/19.
DR   N-PSDB; ABQ54701.
XX
PT   Isolated nucleic acid molecules encoding novel ovarian polypeptides,
PT   useful in the prevention, treatment and diagnosis of cancer (e.g. ovarian
PT   cancer), immune disorders, cardiovascular disorders and neurological
PT   diseases.
XX
PS   Claim 11; SEQ ID NO 2756; 2922pp; English.
XX
CC   The invention relates to 2175 novel human ovarian antigens (ABP41054-
CC   ABP43228) and to cDNAs encoding them (ABQ54131-ABQ56305), and also
CC   encompasses polypeptides 90% identical and polynucleotides 95% identical
CC   to the sequences of the invention. The invention additionally relates to
CC   recombinant vectors and host cells comprising human ovarian antigen
CC   polynucleotides, antibodies against human ovarian antigens, and the use
CC   of ovarian antigen polynucleotides and polypeptides in diagnosing,
CC   treating, prognosing or preventing various ovary and/or breast-related
CC   disorders. Such conditions include ovarian cancer and breast cancer, and
CC   metastatic tumours of ovarian or breast origin, reproductive system
CC   disorders (e.g., infertility, disorders of pregnancy, anovulation,
CC   polycystic ovary syndrome, ovarian cysts, and dysmenorrhoea), endocrine
CC   disorders, infections (e.g., chlamydia, HIV, toxoplasmosis, and toxic
CC   shock syndrome), inflammatory conditions (e.g., mastitis, oophoritis and
CC   vaginitis), immune disorders (e.g., congenital and acquired
CC   immunodeficiencies, autoimmune oophoritis, systemic lupus erythematosus),
CC   blood-related disorders (e.g., anaemia), cardiovascular disorders,
CC   respiratory disorders, neurological disorders, gastrointestinal disorders
CC   and urinary system disorders. Ovarian antigen polypeptides and
CC   polynucleotides may also be used in screening for compounds which
CC   modulate ovarian antigen expression or activity. The polynucleotides may
CC   further be used for gene therapy, chromosome mapping, in the
CC   identification of individuals and in forensic analysis, and the
CC   polypeptides may be used as food additives or to prepare antibodies
CC   useful in disease diagnosis, drug targeting and phenotyping. The present
CC   sequence represents a human ovarian antigen of the invention. Note: The
CC   sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 200 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 200;
  Best Local Similarity   50.0%;  Pred. No. 4.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        146 KQKGVIHI 153


RESULT 90
ADE47730
ID   ADE47730 standard; protein; 202 AA.
XX
AC   ADE47730;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human NOV29b protein SEQ ID NO:92.
XX
KW   human; cardiant; antiarteriosclerotic; hypotensive; immunosuppressive;
KW   dermatological; anorectic; cytostatic; antidiabetic; haemostatic;
KW   anti-HIV; antiasthmatic; antibacterial; virucide; neuroprotective;
KW   nootropic; antiparkinsonian; antilipaemic; gene therapy; vaccine.
XX
OS   Homo sapiens.
XX
PN   WO2003076642-A2.
XX
PD   18-SEP-2003.
XX
PF   02-AUG-2002; 2002WO-US024459.
XX
PR   02-AUG-2001; 2001US-0309501P.
PR   03-AUG-2001; 2001US-0310291P.
PR   08-AUG-2001; 2001US-0310951P.
PR   09-AUG-2001; 2001US-0311292P.
PR   13-AUG-2001; 2001US-0311979P.
PR   14-AUG-2001; 2001US-0312203P.
PR   17-AUG-2001; 2001US-0313156P.
PR   17-AUG-2001; 2001US-0313201P.
PR   20-AUG-2001; 2001US-0313702P.
PR   21-AUG-2001; 2001US-0314031P.
PR   23-AUG-2001; 2001US-0314466P.
PR   28-AUG-2001; 2001US-0315403P.
PR   29-AUG-2001; 2001US-0315853P.
PR   31-AUG-2001; 2001US-0316508P.
PR   21-SEP-2001; 2001US-0323936P.
PR   03-DEC-2001; 2001US-0338078P.
PR   05-FEB-2002; 2002US-0354655P.
PR   05-MAR-2002; 2002US-0361764P.
PR   19-APR-2002; 2002US-0373825P.
PR   15-MAY-2002; 2002US-0380971P.
PR   15-MAY-2002; 2002US-0380980P.
PR   16-MAY-2002; 2002US-0381039P.
PR   28-MAY-2002; 2002US-0383761P.
PR   29-MAY-2002; 2002US-0383887P.
PR   01-AUG-2002; 2002US-00210130.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Zerhusen BD,  Patturajan M,  Kekuda R,  Miller CE,  Rieger DK;
PI   Pena CEA,  Shimkets RA,  Li L,  Berghs C,  Zhong M,  Casman SJ,  Voss EZ;
PI   Boldog FL,  Padigaru M,  Smithson G,  Shenoy SG,  Ji W,  Gorman L;
PI   Vernet CAM,  Leite MW,  Guo X,  Anderson DW,  Spytek KA,  Gerlach VL;
PI   Burgess CE,  Khramtsov NV,  Ort T,  Ellerman K,  Rastelli L,  Agee ML;
PI   Chaudhuri A,  Chant JS,  Dipippo VA,  Edinger SR,  Eisen A,  Gangolli EA;
PI   Giot L,  Ooi CE,  Rothenberg ME,  Spaderna SK,  Hjalt T,  Liu X;
PI   Taupier RJ,  Catterton E;
XX
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DR   WPI; 2003-779062/73.
DR   N-PSDB; ADE47729.
XX
PT   New NOVX polypeptides and nucleic acids, useful for preventing or
PT   treating NOVX-associated disorders, e.g. cancer, diabetes,
PT   atherosclerosis, asthma or AIDS, and in chromosome mapping, tissue typing
PT   or pharmacogenomics.
XX
PS   Claim 1; SEQ ID NO 92; 562pp; English.
XX
CC   The invention relates to a novel (NOVX) human polypeptide. A polypeptide
CC   of the invention has cardiant, antiarteriosclerotic, hypotensive,
CC   immunosuppressive, dermatological, anorectic, cytostatic, antidiabetic,
CC   haemostatic, anti-HIV, antiasthmatic, antibacterial, virucide,
CC   neuroprotective, nootropic, antiparkinsonian, and antilipaemic activity.
CC   A polynucleotide encoding a polypeptide of the invention may have a use
CC   in gene therapy, and as a vaccine. A polypeptide of the invention is
CC   useful in the manufacture of a medicament for treating a syndrome
CC   associated with a human disease, the disease selected from a pathology
CC   associated with the polypeptide. These may also be used in diagnosing,
CC   treating or preventing NOVX-associated disorders such as cardiomyopathy,
CC   atherosclerosis, hypertension, scleroderma, obesity, cancer, diabetes,
CC   haemophilia, graft-versus-host disease, AIDS, asthma, Crohn's disease,
CC   multiple sclerosis, infections, anorexia, cancer-associated cachexia,
CC   neurodegenerative disorders (e.g. Alzheimer's disease or Parkinson's
CC   disease), haematopoietic disorders, dyslipidaemias and other wasting
CC   disorders associated with chronic diseases. The nucleic acids are also
CC   used as hybridisation probes, in chromosome mapping, tissue typing,
CC   preventive medicine, and pharmacogenomics. The polypeptides are also
CC   useful as vaccines. The present sequence represents a NOVX polypeptide of
CC   the invention.
XX
SQ   Sequence 202 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 202;
  Best Local Similarity   50.0%;  Pred. No. 4.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        172 IQMPVGHI 179


RESULT 91
ABU49778
ID   ABU49778 standard; protein; 206 AA.
XX
AC   ABU49778;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #35305.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Yersinia pestis.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Wang L,  Zamudio C,  Malone C,  Haselbeck R,  Ohlsen KL,  Zyskind JW;
PI   Wall D,  Trawick JD,  Carr GJ,  Yamamoto R,  Forsyth RA,  Xu HH;
XX
DR   WPI; 2003-029926/02.
DR   N-PSDB; ACA53648.
XX
PT   New antisense nucleic acids, useful for identifying proteins or screening
PT   for homologous nucleic acids required for cellular proliferation to
PT   isolate candidate molecules for rational drug discovery programs.
XX
PS   Claim 25; SEQ ID NO 77702; 1766pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising any one of
CC   the 6213 antisense sequences given in the specification where expression
CC   of the nucleic acid inhibits proliferation of a cell. Also included are:
CC   (1) a vector comprising a promoter operably linked to the nucleic acid
CC   encoding a polypeptide whose expression is inhibited by the antisense
CC   nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC   polypeptide or its fragment whose expression is inhibited by the
CC   antisense nucleic acid; (4) an antibody capable of specifically binding
CC   the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC   proliferation or the activity of a gene in an operon required for
CC   proliferation; (7) identifying a compound that influences the activity of
CC   the gene product or that has an activity against a biological pathway
CC   required for proliferation, or that inhibits cellular proliferation; (8)
CC   identifying a gene required for cellular proliferation or the biological
CC   pathway in which a proliferation-required gene or its gene product lies
CC   or a gene on which the test compound that inhibits proliferation of an
CC   organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC   compound's activity; (11) a culture comprising strains in which the gene
CC   product is overexpressed or underexpressed; (12) determining the extent
CC   to which each of the strains is present in a culture or collection of
CC   strains; or (13) identifying the target of a compound that inhibits the
CC   proliferation of an organism. The antisense nucleic acids are useful for
CC   identifying proteins or screening for homologous nucleic acids required
CC   for cellular proliferation to isolate candidate molecules for rational
CC   drug discovery programs, or for screening homologous nucleic acids
CC   required for proliferation in cells other than S. aureus, S. typhimurium,
CC   K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC   the target prokaryotic essential genes. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 206 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 206;
  Best Local Similarity   50.0%;  Pred. No. 4.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         47 QQMLVRHI 54


RESULT 92
ABM70558
ID   ABM70558 standard; protein; 207 AA.
XX
AC   ABM70558;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Photorhabdus luminescens protein sequence #3655.
XX
KW   Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
KW   detection; food; gene expression; plant; animal; microorganism; toxin;
KW   antibiotic; biopesticide; virulence factor; disease model; plague;
KW   whooping cough.
XX
OS   Photorhabdus luminescens.
XX
PN   WO200294867-A2.
XX
PD   28-NOV-2002.
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XX
PF   07-FEB-2002; 2002WO-IB003040.
XX
PR   07-FEB-2001; 2001FR-00001659.
XX
PA   (INSP ) INST PASTEUR.
PA   (CNRS ) CNRS CENT NAT RECH SCI.
XX
PI   Duchaud E, Taourit S, Glaser P, Frangeul L, Kunst F, Danchin A;
PI   Buchrieser C;
XX
DR   WPI; 2003-148459/14.
XX
PT   Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
PT   useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
PS   Claim 2; SEQ ID NO 3655; 1205pp; French.
XX
CC   The invention relates to the isolation of genes and their encoded
CC   proteins from Photorhabdus luminescens. The isolated sequences are
CC   sources of probes and primers for detecting the genome of P. luminescens
CC   and related species; to study polymorphisms; for gene analysis and for
CC   detection/amplification of the genes. Antibodies (Ab) raised against the
CC   polypeptides encoded by the genes are used for detection/identification
CC   of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
CC   carry a gene-containing vector are used to select compounds that
CC   modulate, regulate, induce or inhibit expression of the genes in plants,
CC   animals or microorganisms other than P. luminescens and are able to alter
CC   response or sensitivity to toxins and antibiotics produced by P.
CC   luminescens. Cells transformed to express the genes are useful for
CC   recombinant production of the proteins, particularly toxins and
CC   antibacterials useful as insecticides, bactericides and fungicides. The
CC   genes, proteins, vectors containing the genes and Ab are also useful
CC   therapeutically (to treat microbial infection by bacteria or fungi that
CC   are sensitive to P. luminescens-encoded toxins or antibiotics) and as
CC   biopesticides. Other uses of the genes and the proteins are as virulence
CC   factors and for identifying targets of human diseases for which P.
CC   luminescens is a model (particularly plague and whooping cough). This
CC   sequence represents one of the isolated P. luminescens proteins
XX
SQ   Sequence 207 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 207;
  Best Local Similarity   50.0%;  Pred. No. 4.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         47 EQMLVRHI 54


RESULT 93
AAM79206
ID   AAM79206 standard; protein; 209 AA.
XX
AC   AAM79206;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human protein SEQ ID NO 1868.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorder; arthritis; inflammation.
XX
OS   Homo sapiens.
XX
PN   WO200157190-A2.
XX
PD   09-AUG-2001.
XX
PF   05-FEB-2001; 2001WO-US004098.
XX
PR   03-FEB-2000; 2000US-00496914.
PR   27-APR-2000; 2000US-00560875.
PR   20-JUN-2000; 2000US-00598075.
PR   19-JUL-2000; 2000US-00620325.
PR   01-SEP-2000; 2000US-00654936.
PR   15-SEP-2000; 2000US-00663561.
PR   20-OCT-2000; 2000US-00693325.
PR   30-NOV-2000; 2000US-00728422.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT, Liu C, Drmanac RT, Asundi V, Zhou P, Xu C, Cao Y;
PI   Ma Y, Zhao QA, Wang D, Wang J, Zhang J, Ren F, Chen R, Wang ZW;
PI   Xue AJ, Yang Y, Wejhrman T, Goodrich R;
XX
DR   WPI; 2001-476283/51.
DR   N-PSDB; AAK52339.
XX
PT   Nucleic acids encoding polypeptides with cytokine-like activities, useful
PT   in diagnosis and gene therapy.
XX
PS   Claim 20; Page 4253-4254; 6221pp; English.
XX
CC   The invention relates to polynucleotides (AAK51456-AAK53435) and the
CC   encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), 2111
CC   (AAK52582) and 3666 (AAM80020) are omitted as the relevant pages from the
CC   sequence listing were missing at the time of publication
XX
SQ   Sequence 209 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 209;
  Best Local Similarity   50.0%;  Pred. No. 4.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         72 FQGRVSHI 79


RESULT 94
AAU37626
ID   AAU37626 standard; protein; 212 AA.
XX
AC   AAU37626;
XX
DT   14-FEB-2002  (first entry)
XX
DE   Streptococcus pneumoniae cellular proliferation protein #55.
XX
KW   Antisense; prokaryotic cellular proliferation protein; antibiotic;
KW   antibacterial; drug design.
XX
OS   Streptococcus pneumoniae.
XX
PN   WO200170955-A2.
XX
PD   27-SEP-2001.
XX
PF   21-MAR-2001; 2001WO-US009180.
XX
PR   21-MAR-2000; 2000US-0191078P.
PR   23-MAY-2000; 2000US-0206848P.
PR   26-MAY-2000; 2000US-0207727P.
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PR   23-OCT-2000; 2000US-0242578P.
PR   27-NOV-2000; 2000US-0253625P.
PR   22-DEC-2000; 2000US-0257931P.
PR   16-FEB-2001; 2001US-0269308P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Haselbeck R,  Ohlsen KL,  Zyskind JW,  Wall D,  Trawick JD,  Carr GJ;
PI   Yamamoto RT,  Xu HH;
XX
DR   WPI; 2001-611495/70.
DR   N-PSDB; AAS55485.
XX
PT   New polynucleotides for the identification and development of
PT   antibiotics, comprise sequences of antisense nucleic acids.
XX
PS   Example 3; SEQ ID NO 13219; 511pp; English.
XX
CC   The invention relates to antisense inhibitors of genes essential to
CC   prokaryotic cellular proliferation, their use in identifying the genes,
CC   their use in the discovery of novel antibiotics, the essential genes
CC   themselves and the encoded proteins. The prokaryotes used are Escherichia
CC   coli, Staphylococcus aureus, Salmonella typhi, Klebsiella pneumoniae,
CC   Pseudomonas aeruginosa and Enterococcus faecalis. The invention is also
CC   useful for the identification of potential new targets for antibiotic
CC   development. The antisense nucleic acids can also be used to identify
CC   proteins used in proliferation, to express these proteins, and to obtain
CC   antibodies capable of binding to the expressed proteins. The proteins can
CC   be used to screen compounds in rational drug discovery programmes. The
CC   antisense nucleic acid sequence is also useful to screen for homologous
CC   nucleic acids which are required for cell proliferation in a wide variety
CC   of organisms. The present sequence represents an essential prokaryotic
CC   cellular proliferation protein. Note: The sequence data for this patent
CC   did not form part of the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 212 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 212;
  Best Local Similarity   50.0%;  Pred. No. 4.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         22 EQFHVAHI 29


RESULT 95
ABU00572
ID   ABU00572 standard; protein; 212 AA.
XX
AC   ABU00572;
XX
DT   23-OCT-2003  (revised)
DT   11-FEB-2003  (first entry)
XX
DE   S. pneumoniae type 4 strain protein from coding region #139.
XX
KW   Bacterial meningitis; pneumonia; sepsis; otitis media; ear infection;
KW   antiinflammatory; antibacterial; immunostimulant; auditory; respiratory;
KW   gene therapy; vaccine.
XX
OS   Streptococcus pneumoniae; type 4 strain.
XX
PN   WO200277021-A2.
XX
PD   03-OCT-2002.
XX
PF   27-MAR-2002; 2002WO-IB002163.
XX
PR   27-MAR-2001; 2001GB-00007658.
XX
PA   (CHIR-) CHIRON SPA.
PA   (GENO-) INST GENOMIC RES.
XX
PI   Masignani V,  Tettelin H,  Fraser C;
XX
DR   WPI; 2003-040579/03.
DR   N-PSDB; ABX05851.
XX
PT   New proteins and nucleic acid molecules from Streptococcus pneumoniae,
PT   useful as medicaments for treating or preventing a disease or infection
PT   due to streptococcus bacteria, such as pneumonia, sepsis, otitis media or
PT   ear infection.
XX
PS   Claim 1; SEQ ID NO 278; 56pp; English.
XX
CC   The invention relates to a protein comprising or having at least 50%
CC   identity to any of the 2469 amino acid sequences, identified in the
CC   specification (available on a computer readable format), or its fragment,
CC   expressed from 2469 of 2489 identified DNA coding regions from the
CC   Streptococcus pneumoniae type 4 strain genomic sequence appearing as
CC   ABS56454. Also included are an antibody which binds one of the proteins,
CC   treating a patient by administering the protein, DNA or antibody (in a
CC   composition), a kit comprising first and second primers, which are the
CC   nucleic acid cited above or fragments between nucleotides 8-100 of a
CC   sequence not defined in the specification, for amplifying a target
CC   sequence contained within a Streptococcus nucleic acid sequence, where
CC   the first primer is substantially complementary to the target sequence
CC   and the second primer is substantially complementary to the complement of
CC   the target sequence, and where the parts of the primers having
CC   substantial complementarity define the termini of the target sequence to
CC   be amplified, assay comprising contacting a test compound with the
CC   protein, and determining whether the test compound binds to the protein
CC   and a Streptococcus pneumoniae bacterium, where one or more genes
CC   encoding the proteins has been rendered inactive. The proteins, nucleic
CC   acid molecules, antibody and compositions are useful as medicaments for
CC   treating or preventing a disease or infection due to streptococcus
CC   bacteria, particularly S. pneumoniae, such as pneumonia, sepsis, otitis
CC   media or ear infection. They are also useful in developing vaccines,
CC   diagnostics and antibiotics. The methods are useful for identifying
CC   immunodominant proteins. The present sequence is one of the 2469 proteins
CC   expressed by the identified coding regions from the genomic sequence.
CC   Note: The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic format directly from WIPO
CC   at ftp.wipo.int/pub/published_pct_sequences. (Updated on 23-OCT-2003 to
CC   standardise OS field)
XX
SQ   Sequence 212 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 212;
  Best Local Similarity   50.0%;  Pred. No. 4.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         22 EQFHVAHI 29


RESULT 96
ABP81534
ID   ABP81534 standard; protein; 212 AA.
XX
AC   ABP81534;
XX
DT   04-MAR-2003  (first entry)
XX
DE   Streptococcus pneumoniae polypeptide SEQ ID NO 612.
XX
KW   Streptococcus pneumoniae; infection; otitis media; antibacterial;
KW   diagnosis; gene therapy.
XX
OS   Streptococcus pneumoniae.
XX
PN   WO200283855-A2.
```

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XX
PD   24-OCT-2002.
XX
PF   12-APR-2002; 2002WO-US011524.
XX
PR   16-APR-2001; 2001US-0283948P.
PR   18-APR-2001; 2001US-0284443P.
XX
PA   (AMCY ) AMERICAN CYANAMID CO.
XX
PI   Zagursky RJ,  Masi AW,  Green BA,  Chakravarti DN,  Russell DP;
PI   Wooters JL;
XX
DR   WPI; 2003-093010/08.
DR   N-PSDB; ABZ42382.
XX
PT   New Streptococcus pneumoniae polynucleotides, useful for treating or
PT   preventing S. pneumoniae infections, or non-systemic diseases, e.g.
PT   otitis media, which are induced or exacerbated by S. pneumoniae.
XX
PS   Claim 42; Page 853-854; 1091pp; English.
XX
CC   The invention relates to isolated polynucleotides (ABZ72147-ABZ42522) of
CC   a Streptococcus pneumoniae genomic sequence, a fragment or degenerate
CC   variant of the polynucleotide or a nucleic acid sequence 95% identical to
CC   one of the polynucleotides. The S. pneumoniae polynucleotides and encoded
CC   polypeptides (ABP81299-ABP81674) are useful for treating or preventing S.
CC   pneumoniae infections or non-systemic diseases, e.g. otitis media, which
CC   are induced or exacerbated by S. pneumoniae. These are also useful for
CC   detecting S. pneumoniae in a biological sample or diagnosing S.
CC   pneumoniae infection in a subject. The polynucleotides have antibacterial
CC   activity and are useful in gene therapy
XX
SQ   Sequence 212 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 212;
  Best Local Similarity   50.0%;  Pred. No. 4.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         22 EQFHVAHI 29


RESULT 97
ABU45820
ID   ABU45820 standard; protein; 212 AA.
XX
AC   ABU45820;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #31347.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Streptococcus pneumoniae.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Wang L,  Zamudio C,  Malone C,  Haselbeck R,  Ohlsen KL,  Zyskind JW;
PI   Wall D,  Trawick JD,  Carr GJ,  Yamamoto R,  Forsyth RA,  Xu HH;
XX
DR   WPI; 2003-029926/02.
DR   N-PSDB; ACA49690.
XX
PT   New antisense nucleic acids, useful for identifying proteins or screening
PT   for homologous nucleic acids required for cellular proliferation to
PT   isolate candidate molecules for rational drug discovery programs.
XX
PS   Claim 25; SEQ ID NO 73744; 1766pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising any one of
CC   the 6213 antisense sequences given in the specification where expression
CC   of the nucleic acid inhibits proliferation of a cell. Also included are:
CC   (1) a vector comprising a promoter operably linked to the nucleic acid
CC   encoding a polypeptide whose expression is inhibited by the antisense
CC   nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC   polypeptide or its fragment whose expression is inhibited by the
CC   antisense nucleic acid; (4) an antibody capable of specifically binding
CC   the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC   proliferation or the activity of a gene in an operon required for
CC   proliferation; (7) identifying a compound that influences the activity of
CC   the gene product or that has an activity against a biological pathway
CC   required for proliferation, or that inhibits cellular proliferation; (8)
CC   identifying a gene required for cellular proliferation or the biological
CC   pathway in which a proliferation-required gene or its gene product lies
CC   or a gene on which the test compound that inhibits proliferation of an
CC   organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC   compound's activity; (11) a culture comprising strains in which the gene
CC   product is overexpressed or underexpressed; (12) determining the extent
CC   to which each of the strains is present in a culture or collection of
CC   strains; or (13) identifying the target of a compound that inhibits the
CC   proliferation of an organism. The antisense nucleic acids are useful for
CC   identifying proteins or screening for homologous nucleic acids required
CC   for cellular proliferation to isolate candidate molecules for rational
CC   drug discovery programs, or for screening homologous nucleic acids
CC   required for proliferation in cells other than S. aureus, S. typhimurium,
CC   K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC   the target prokaryotic essential genes. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 212 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 212;
  Best Local Similarity   50.0%;  Pred. No. 4.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         22 EQFHVAHI 29


RESULT 98
AAG53046
ID   AAG53046 standard; protein; 213 AA.
XX
AC   AAG53046;
XX
DT   18-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 67499.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
```

XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
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Query Match 100.0%; Score 25; DB 3; Length 213;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
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Db 181 SQRKVNHI 188

RESULT 99
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ID AAG07579 standard; protein; 213 AA.
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AC AAG07579;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 4786.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
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PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 213;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Db        202 DQDLVSHI 209
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RESULT 100
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ID ABG20132 standard; protein; 213 AA.
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AC ABG20132;
XX
DT 18-FEB-2002 (first entry)
XX
DE Novel human diagnostic protein #20123.
XX
KW Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS Homo sapiens.
XX
PN WO200175067-A2.
XX
PD 11-OCT-2001.
XX
PF 30-MAR-2001; 2001WO-US008631.
XX
PR 31-MAR-2000; 2000US-00540217.
PR 23-AUG-2000; 2000US-00649167.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Drmanac RT, Liu C, Tang YT;
XX
DR WPI; 2001-639362/73.
DR N-PSDB; AAS84319.
XX
PT New isolated polynucleotide and encoded polypeptides, useful in
PT diagnostics, forensics, gene mapping, identification of mutations

PT responsible for genetic disorders or other traits and to assess
PT biodiversity.
XX
PS Claim 20; SEQ ID NO 50491; 103pp; English.
XX
CC The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC sequences. (I) is useful as hybridisation probes, polymerase chain
CC reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC and in recombinant production of (II). The polynucleotides are also used
CC in diagnostics as expressed sequence tags for identifying expressed
CC genes. (I) is useful in gene therapy techniques to restore normal
CC activity of (II) or to treat disease states involving (II). (II) is
CC useful for generating antibodies against it, detecting or quantitating a
CC polypeptide in tissue, as molecular weight markers and as a food
CC supplement. (II) and its binding partners are useful in medical imaging
CC of sites expressing (II). (I) and (II) are useful for treating disorders
CC involving aberrant protein expression or biological activity. The
CC polypeptide and polynucleotide sequences have applications in
CC diagnostics, forensics, gene mapping, identification of mutations
CC responsible for genetic disorders or other traits to assess biodiversity
CC and to produce other types of data and products dependent on DNA and
CC amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC amino acid sequences of the invention. Note: The sequence data for this
CC patent did not appear in the printed specification, but was obtained in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 213 AA;

Query Match 100.0%; Score 25; DB 4; Length 213;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 12 VQSQVRHI 19

RESULT 101
AAR98160
ID AAR98160 standard; protein; 215 AA.
XX
AC AAR98160;
XX
DT 16-OCT-2003 (revised)
DT 08-JAN-1997 (first entry)
XX
DE NodB protein of Rhizobium trifolii.
XX
KW Legume exudate-inducible promoter; promoter; nod; Rhizobium; toxin;
KW insecticide; Bacillus thuringiensis; gene expression; recombinant;
KW hydrogenase; metallothionein; prolactin.
XX
OS Rhizobium leguminosarum.
XX
PN US5484718-A.
XX
PD 16-JAN-1996.
XX
PF 17-JUN-1986; 86US-00875300.
XX
PR 17-JUN-1986; 86US-00875300.
XX
PA (MYCO) MYCOGEN PLANT SCI INC.
XX
PI Djordjevic MA, Watson JM, Kuempel PL, Innes RW, Schofield PR;
PI Scott KF, Rolfe BG;
XX
DR WPI; 1996-087064/09.
XX
PT Gene expression using legume exudate-inducible promoter - useful for
PT expressing proteins, esp. Bacillus thuringiensis toxin, on contact with
PT legume exudate.
XX
PS Disclosure; Fig 2; 32pp; English.
XX
CC Expressing foreign structural genes using a legume exudate-inducible
CC promoter comprises placing the structural gene under the control of such
CC a promoter and inserting the construct into a recombinant DNA molecule
CC comprising a nod D gene of a strain of Rhizobium. The construct is then
CC introduced into a bacterial strain in which the promoter is active and
CC the nod D gene is expressed. The bacterial strain is then combined with
CC an effective amount of a nodulation gene inducing composition effective
CC for induction of a legume exudate-inducible gene. The promoter is
CC preferably the promoter of the nod ABC or nod FE genes of Rhizobium
CC trifoli. The structural gene is preferably an insect toxin gene of
CC Bacillus thuringiensis. This sequence is the promoter region between nodD
CC and the nodKABC gene cluster in Bradyrhizobium sp. (Parasponia) ANU 289.
CC Examples of other proteins that can be usefully expressed using such
CC methods include: hydrogenase, metallothionein and prolactin. (Updated on
CC 16-OCT-2003 to standardise OS field)
XX
SQ Sequence 215 AA;

Query Match 100.0%; Score 25; DB 2; Length 215;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
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Db 109 PQVAVQHI 116

RESULT 102
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ID ABB48908 standard; protein; 215 AA.
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AC ABB48908;
XX
DT 05-FEB-2002 (first entry)
XX
DE Listeria monocytogenes protein #1612.
XX
KW Antibacterial; gene therapy; vaccine; biosynthesis; biodegradation;
KW vitamin B12; bacterial infection; disease.
XX
OS Listeria monocytogenes.
XX
PN WO200177335-A2.
XX
PD 18-OCT-2001.
XX
PF 11-APR-2001; 2001WO-FR001118.
XX
PR 11-APR-2000; 2000FR-00004629.
XX
PA (INSP) INST PASTEUR.
XX
PI Buchrieser C, Frangeul L, Couve E, Rusniok C, Fsihi H, Dehoux P;
PI Dussurget O, Chetouani F, Nedjari H, Glaser P, Kunst F, Cossart P;
PI Daniels J, Goebel W, Kreft J, Kuhn M, Ng E, Vazquez-Boland JA;
PI Dominguez-Bernal G, Garrido-Garcia P, Tierrez-Martinez A, Amend A;
PI Chakraborty T, Domann E, Hain T, Berche P, Charbit A, Durant L;
PI Perez-Diaz J, Baquero F, Garcia Del Portillo F, Gomez-Lopez N;
PI Maduenio E, De Pablos B, Wehland J, Kaerst U, Entian K, Hauf J;
PI Rose M, Voss H;
XX
DR WPI; 2002-010914/01.
XX
PT Genomic sequence for Listeria monocytogenes, useful e.g. for treatment
PT and prevention of Listeria and related bacterial infections, and related
PT polypeptides.
XX
PS Claim 6; SEQ ID NO 1613; 192pp; French.
XX
CC The present invention relates to the genome sequence of Listeria

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CC   monocytogenes EGD-e (see ABA03041). The genome sequence and fragments of
CC   it are useful for selecting probes and primers for detecting genes in L.
CC   monocytogenes and related organisms, and for studying genetic
CC   polymorphisms and other genomes. The present sequence is a protein
CC   encoded by the genome sequence of the present invention. Proteins
CC   expressed from the genome sequence are useful for raising specific
CC   antibodies, identification of L. monocytogenes and related organisms, and
CC   for biosynthesis and biodegradation, especially biosynthesis of Vitamin
CC   B12. The genome sequence and proteins encoded by it are also useful for
CC   selecting compounds that regulate gene expression and cell replication
CC   and modulate L. monocytogenes-related diseases. In addition, the genome
CC   sequence and proteins encoded by it are useful in pharmaceutical and
CC   vaccines compositions for the treatment or prevention of infections by L.
CC   monocytogenes and related organisms. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 215 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 215;
  Best Local Similarity   50.0%;  Pred. No. 4.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        187 KQVRVHHI 194


RESULT 103
AAW79088
ID   AAW79088 standard; protein; 216 AA.
XX
AC   AAW79088;
XX
DT   11-JAN-1999  (first entry)
XX
DE   Human secreted protein bi129_2.
XX
KW   Secreted protein; human; bd164_7.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Domain          11
FT                   /note= "predicted transmembrane domain is centered at
FT                   residue 11"
FT   Domain          36
FT                   /note= "predicted transmembrane domain is centered at
FT                   residue 36"
FT   Domain          69
FT                   /note= "predicted transmembrane domain is centered at
FT                   residue 69"
FT   Peptide         91. .103
FT                   /label= Sig_peptide
FT                   /note= "predicted leader/signal sequence"
FT   Domain          100
FT                   /note= "predicted transmembrane domain is centered at
FT                   residue 100"
FT   Protein         104. .216
FT                   /label= Mat_protein
FT   Domain          131
FT                   /note= "predicted transmembrane domain is centered at
FT                   residue 131"
FT   Domain          185
FT                   /note= "predicted transmembrane domain is centered at
FT                   residue 185"
XX
PN   WO9841539-A2.
XX
PD   24-SEP-1998.
XX
PF   19-MAR-1998;   98WO-US005474.
XX
PR   19-MAR-1997;   97US-00820493.
PR   18-MAR-1998;   98US-00040963.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Racie LA,  Merberg D,  Treacy M;
PI   Spaulding V,  Agostino MJ;
XX
DR   WPI; 1998-521163/44.
DR   N-PSDB; AAV61478.
XX
PT   New polynucleotide(s) encoding secreted human proteins - derived from
PT   human foetal kidney, adult testes and adult or foetal brain cDNA
PT   libraries.
XX
PS   Claim 14; Page 68-69; 112pp; English.
XX
CC   This is the amino acid sequence of a novel human secreted protein,
CC   designated bi129_2. The sequence was deduced from a full-length cDNA
CC   clone (see AAV61478) obtained from a foetal kidney cDNA library. The
CC   protein shows some homology to database sequences. The invention provides
CC   cDNA clones (see AAV61477-87) from human foetal kidney, adult testis, and
CC   adult or foetal brain cDNA libraries that code for secreted proteins (see
CC   AAW79087-97). These clones are deposited as ATCC 98364. The
CC   polynucleotides and proteins are predicted to have useful biological
CC   activities which would make them suitable for treating, preventing or
CC   ameliorating medical conditions in humans and animals, although no
CC   supporting data is given. Suggested activities include nutritional,
CC   immune stimulating (e.g. as vaccines) or suppressing, haematopoiesis
CC   regulating, tissue growth, activin/inhibin, chemotactic/chemokinetic,
CC   haemostatic and thrombolytic, receptor/ligand, antiinflammatory,
CC   cadherin/tumour invasion suppressor and tumour inhibition activities
XX
SQ   Sequence 216 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 216;
  Best Local Similarity   50.0%;  Pred. No. 4.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        165 LQLLVLHI 172


RESULT 104
ABP61789
ID   ABP61789 standard; protein; 216 AA.
XX
AC   ABP61789;
XX
DT   04-OCT-2002  (first entry)
XX
DE   Human polypeptide SEQ ID NO 143.
XX
KW   Human; cytostatic; antirheumatic; antiarthritic; vulnerary; analgesic;
KW   antiinflammatory; antibacterial; immunosuppressive; antiparkinsonian;
KW   neuroprotective; nootropic; osteopathic; haemostatic; vasotropic;
KW   antiulcer; fungicide; antidiabetic; antiasthmatic; antiallergic;
KW   immunostimulant; antiparasitic; secreted protein; transmembrane protein;
KW   cytokine; cell proliferation; cell differentiation; autoimmune disease;
KW   stem cell; growth factor; nervous system disease; neuropathy;
KW   Alzheimer's disease; Parkinson's disease; Huntington's disease;
KW   osteoporosis; severe combined immunodeficiency; SCID; infection;
KW   multiple sclerosis; rheumatoid arthritis; gene therapy.
XX
OS   Homo sapiens.
XX
PN   US2002065394-A1.
XX
PD   30-MAY-2002.
XX
PF   22-DEC-2000; 2000US-00745763.
```

```
XX
PR   18-MAR-1998;   98US-00040963.
XX
PA   (JACO/) JACOBS K.
PA   (MCCO/) MCCOY J M.
PA   (LAVA/) LAVALLIE E R.
PA   (COLL/) COLLINS-RACIE L A.
PA   (EVAN/) EVANS C.
PA   (MERB/) MERBERG D.
PA   (TREA/) TREACY M.
PA   (SPAU/) SPAULDING V.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M,  Spaulding V;
XX
DR   WPI; 2002-582343/62.
DR   N-PSDB; ABQ92005.
XX
PT   Novel secreted or transmembrane protein and polynucleotide encoding the
PT   protein, useful for diagnosis and treatment of neurological disorders,
PT   cancer, autoimmune diseases, bone disorders and lung or liver fibrosis.
XX
PS   Claim 14; Page 92-93; 284pp; English.
XX
CC   The invention relates to human secreted or transmembrane protein (I),
CC   their fragments and is encoded by specific complementary deoxyribonucleic
CC   acid (cDNA) inserts (II), where the protein is substantially free from
CC   other mammalian proteins. (I) are useful for preventing, treating or
CC   ameliorating a medical condition, especially immunological treatment or
CC   prevention of tumours. (I) exhibits activity relating to angiogenesis,
CC   cytokine, cell proliferation, cell differentiation, antiinflammatory,
CC   stem cell growth factor activity and activin or inhibin-related
CC   activities. (I) can be used to manipulate stem cells in culture to give
CC   rise to neuroepithelial cells that can be used to augment or replace
CC   cells damaged by illness, autoimmune disease, accidental damage or
CC   genetic disorders. (I) induces the proliferation of neural cells and
CC   regeneration of nerve and brain tissue and is useful for the treatment of
CC   central and peripheral nervous system diseases and neuropathies, such as
CC   Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic
CC   lateral sclerosis. (I) is involved in chemotactic or chemokinetic
CC   activity, regulation of haematopoiesis and is useful for treating myeloid
CC   or lymphoid cell disorders, platelet disorders such as thrombocytopaenia
CC   and for regeneration of bone, cartilage, tendon, ligament and/or nerve
CC   tissue growth and in tissue repair, healing of burns, incisions, ulcers,
CC   for treating osteoporosis, osteoarthritis, bone degenerative disorders or
CC   periodontal disease. (I) is also useful for gut protection or
CC   regeneration and treatment of lung or liver fibrosis, reperfusion injury
CC   in various tissues, various immune deficiencies and disorders including
CC   severe combined immunodeficiency (SCID), bacterial or fungal infections,
CC   autoimmune disorders e.g. multiple sclerosis, rheumatoid arthritis,
CC   diabetes mellitus, myasthenia gravis, allergic reactions and conditions,
CC   such as asthma or other respiratory problems. (II) is useful to express
CC   recombinant protein, as markers for tissues in which the corresponding
CC   protein is preferentially expressed and in gene therapy. The present
CC   sequence is that of a polypeptide of the invention
XX
SQ   Sequence 216 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 216;
  Best Local Similarity   50.0%;  Pred. No. 4.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        165 LQLLVLHI 172


RESULT 105
ABU30667
ID   ABU30667 standard; protein; 216 AA.
XX
AC   ABU30667;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #16194.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Haemophilus influenzae.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Wang L,  Zamudio C,  Malone C,  Haselbeck R,  Ohlsen KL,  Zyskind JW;
PI   Wall D,  Trawick JD,  Carr GJ,  Yamamoto R,  Forsyth RA,  Xu HH;
XX
DR   WPI; 2003-029926/02.
DR   N-PSDB; ACA34537.
XX
PT   New antisense nucleic acids, useful for identifying proteins or screening
PT   for homologous nucleic acids required for cellular proliferation to
PT   isolate candidate molecules for rational drug discovery programs.
XX
PS   Claim 25; SEQ ID NO 58591; 1766pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising any one of
CC   the 6213 antisense sequences given in the specification where expression
CC   of the nucleic acid inhibits proliferation of a cell. Also included are:
CC   (1) a vector comprising a promoter operably linked to the nucleic acid
CC   encoding a polypeptide whose expression is inhibited by the antisense
CC   nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC   polypeptide or its fragment whose expression is inhibited by the
CC   antisense nucleic acid; (4) an antibody capable of specifically binding
CC   the polypeptide; (5) producing the polypeptide; (6) inhibiting cellular
CC   proliferation or the activity of a gene in an operon required for
CC   proliferation; (7) identifying a compound that influences the activity of
CC   the gene product or that has an activity against a biological pathway
CC   required for proliferation, or that inhibits cellular proliferation; (8)
CC   identifying a gene required for cellular proliferation or the biological
CC   pathway in which a proliferation-required gene or its gene product lies
CC   or a gene on which the test compound that inhibits proliferation of an
CC   organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC   compound's activity; (11) a culture comprising strains in which the gene
CC   product is overexpressed or underexpressed; (12) determining the extent
CC   to which each of the strains is present in a culture or collection of
CC   strains; or (13) identifying the target of a compound that inhibits the
CC   proliferation of an organism. The antisense nucleic acids are useful for
CC   identifying proteins or screening for homologous nucleic acids required
CC   for cellular proliferation to isolate candidate molecules for rational
CC   drug discovery programs, or for screening homologous nucleic acids
CC   required for proliferation in cells other than S. aureus, S. typhimurium,
CC   K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC   the target prokaryotic essential genes. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 216 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 216;
  Best Local Similarity   50.0%;  Pred. No. 4.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
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              :|::|:||
Db          37 YQGEVGHI 44


RESULT 106
AAY84844
ID   AAY84844 standard; protein; 217 AA.
XX
AC   AAY84844;
XX
DT   08-AUG-2000  (first entry)
XX
DE   Protein encoded by the nodB gene.
XX
KW   Nodulation efficiency factor; Sinorhizobium meliloti USDA 1170; nodJ;
KW   strain NRG 185; cut-leaf medic; nod gene; nodA; nodB; nodC; nodD; nodI;
KW   nodulation factor; nodulation efficiency; Medicago laciniata;
KW   nitrogen fixation; legume.
XX
OS   Sinorhizobium meliloti.
XX
PN   WO200022138-A1.
XX
PD   20-APR-2000.
XX
PF   13-OCT-1999;   99WO-CA000955.
XX
PR   14-OCT-1998;   98US-0104162P.
XX
PA   (AGRI-) AGRIC & AGRI-FOOD CANADA.
XX
PI   Barran LR,  Bromfield ESP,  Brown DCW;
XX
DR   WPI; 2000-317991/27.
DR   N-PSDB; AAA14914.
XX
PT   Isolated nodulation efficiency factor for improving nitrogen fixation in
PT   legumes comprising a portion of EcoRI/BamHI fragment of Sinorhizobium
PT   meliloti that confers the nodulating ability.
XX
PS   Disclosure; Fig 1; 47pp; English.
XX
CC   AAY84842-52 represent protein encoded by the 7.2 kb EcoRI/BamHI fragment
CC   from Sinorhizobium meliloti USDA 1170. This fragment encoded nodulation
CC   efficiency factors, and gives S. meliloti strain NRG 185 the ability to
CC   nodulate at least 50% of inoculated Medicago laciniata (cut-leaf medic)
CC   plants within 10 days of inoculation. The fragment contains nod genes
CC   nodA, nodB, nodC, nodD, nodI, nodJ. The nodulation factors are used to
CC   increase the nodulation efficiency of Sinorhizobium for Medicago
CC   laciniata. The nodulation factors are also used to improve nitrogen
CC   fixation in legumes
XX
SQ   Sequence 217 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 217;
  Best Local Similarity   50.0%;  Pred. No. 4.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        110 PQAVVRHI 117


RESULT 107
ABU52145
ID   ABU52145 standard; protein; 217 AA.
XX
AC   ABU52145;
XX
DT   07-MAY-2003  (first entry)
XX
DE   Helicobacter pylori selected interacting domain (SID) protein #1489.
XX
KW   Protein-protein interaction; ulcer; selected interacting domain; SID.
XX
OS   Helicobacter pylori.
XX
PN   WO200266501-A2.
XX
PD   29-AUG-2002.
XX
PF   28-DEC-2001; 2001WO-EP015428.
XX
PR   02-JAN-2001; 2001US-0259302P.
XX
PA   (HYBR-) HYBRIGENICS.
PA   (INSP ) INST PASTEUR.
XX
PI   Legrain P,  Rain J,  Colland F,  De Reuse H,  Labigne A;
XX
DR   WPI; 2002-674910/72.
DR   N-PSDB; ABX66890.
XX
PT   New complexes of protein-protein interactions in Helicobacter pylori,
PT   useful for identifying modulating compounds for treating or preventing
PT   ulcers in mammals.
XX
PS   Claim 6; Page 447; 642pp; English.
XX
CC   The invention describes a complex of protein-protein interactions in
CC   Helicobacter pylori selected from 421 complexes given in the
CC   specification. The complex of protein-protein interactions are useful for
CC   screening for agents which modulate the interaction of proteins.
CC   Modulating compounds which binds to a targeted bacterial protein may be
CC   used for treating or preventing ulcers in a human or animal. This is the
CC   amino acid sequence of a selected interacting domain (SID), identified
CC   via protein-protein interactions. Note: Where the patent number printed
CC   at the top of the pages in the specification has obscured areas of
CC   protein sequence, the indexer has replaced the residue with an X to
CC   represent an illegible residue
XX
SQ   Sequence 217 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 217;
  Best Local Similarity   50.0%;  Pred. No. 4.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         44 RQVGVPHI 51


RESULT 108
ABU20649
ID   ABU20649 standard; protein; 217 AA.
XX
AC   ABU20649;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #6176.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Bacteroides fragilis.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
```

PR 06-MAR-2002; 2002US-0362699P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX
DR WPI; 2003-029926/02.
DR N-PSDB; ACA24519.
XX
PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 25; SEQ ID NO 48573; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than S. aureus, S. typhimurium,
CC K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 217 AA;

Query Match 100.0%; Score 25; DB 6; Length 217;
Best Local Similarity 50.0%; Pred. No. 4.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 168 SQRAVDHI 175

RESULT 109
ABG77402
ID ABG77402 standard; protein; 218 AA.
XX
AC ABG77402;
XX
DT 05-NOV-2002 (first entry)
XX
DE Selected Interacting Domain (SID) polypeptide #213.
XX
KW Yeast; selected interacting domain; SID; antifungal; cancer; cytostatic;
KW neuroprotective; Candida infection; gene therapy;
KW neurodegenerative disease.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200259255-A2.
XX
PD 01-AUG-2002.
XX
PF 25-JAN-2002; 2002WO-EP001350.
XX
PR 26-JAN-2001; 2001US-0264577P.
XX
PA (HYBR-) HYBRIGENICS.
XX
PI Legrain P;
XX
DR WPI; 2002-619165/66.
DR N-PSDB; ABS63016.
XX
PT New complex between two interacting bait and prey Saccharomyces
PT cerevisiae polypeptides, useful for preventing or treating Candida
PT infection, cancer or neurodegenerative diseases in a mammal.
XX
PS Claim 6; Page 151-152; 196pp; English.
XX
CC The invention relates to a complex between two interacting Saccharomyces
CC cerevisiae polypeptides, comprising two Selected Interacting Domain (SID)
CC polypeptides as bait and prey proteins. A pharmaceutical composition
CC comprising the complex is useful for preventing or treating Candida
CC infection, cancer and neurodegenerative diseases in a human or animal,
CC preferably in a mammal. This sequence represents a SID polypeptide of the
CC invention
XX
SQ Sequence 218 AA;

Query Match 100.0%; Score 25; DB 5; Length 218;
Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 154 QQVPVGHI 161

RESULT 110
ABJ11304
ID ABJ11304 standard; protein; 218 AA.
XX
AC ABJ11304;
XX
DT 10-DEC-2002 (first entry)
XX
DE Yeast selected interacting domain protein SEQ ID NO: 742.
XX
KW Yeast; protein-protein interaction; Selected Interacting Domain;
KW SID (RTM); secretion yield; cancer; neurodegenerative disease; fungicide;
KW cytostatic; neuroprotective.
XX
OS Saccharomyces cerevisiae.
XX
PN WO200266504-A2.
XX
PD 29-AUG-2002.
XX
PF 14-FEB-2002; 2002WO-EP002299.
XX
PR 16-FEB-2001; 2001US-0269266P.
XX
PA (HYBR-) HYBRIGENICS.
XX
PI Legrain P;
XX
DR WPI; 2002-674913/72.
DR N-PSDB; ABT11621.
XX

PT New protein-protein complexes of Saccharomyces cerevisiae, useful in drug
PT screening or development, for developing yeast strains with better
PT secretion yield of protein, or in gene therapy (e.g. to treat Candida
PT infection or cancer).
XX
PS Claim 6; Page 300; 357pp; English.
XX
CC The present invention relates to complexes between Saccharomyces
CC cerevisiae Selected Interacting Domain (SID (RTM)) proteins and coding
CC sequences. The protein complexes of S. cerevisiae are useful in drug
CC development, in screening drugs or agents that modulate the interaction
CC of proteins, for developing yeast strains with better secretion yield of
CC protein, and in gene therapy. The protein complexes, polypeptides and
CC polynucleotides are useful for preventing or treating Candida infection,
CC cancer or neurodegenerative diseases in humans or animals. The present
CC sequence is a protein of the invention
XX
SQ Sequence 218 AA;

Query Match 100.0%; Score 25; DB 5; Length 218;
Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 154 QQVPVGHI 161

RESULT 111
AAG07578
ID AAG07578 standard; protein; 219 AA.
XX
AC AAG07578;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 4785.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.
PR 16-JUL-1999; 99US-0144086P.
PR 19-JUL-1999; 99US-0144325P.
PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 19-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144352P.
PR 20-JUL-1999; 99US-0144632P.
PR 20-JUL-1999; 99US-0144884P.
PR 21-JUL-1999; 99US-0144814P.
PR 21-JUL-1999; 99US-0145086P.
PR 21-JUL-1999; 99US-0145088P.
PR 22-JUL-1999; 99US-0145085P.
PR 22-JUL-1999; 99US-0145087P.
PR 22-JUL-1999; 99US-0145089P.
PR 22-JUL-1999; 99US-0145192P.
PR 23-JUL-1999; 99US-0145145P.
PR 23-JUL-1999; 99US-0145218P.

PR 23-JUL-1999; 99US-0145224P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 27-JUL-1999; 99US-0145919P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 02-AUG-1999; 99US-0146389P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147192P.
PR 05-AUG-1999; 99US-0147260P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147493P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148319P.
PR 12-AUG-1999; 99US-0148341P.
PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148684P.
PR 16-AUG-1999; 99US-0149368P.
PR 17-AUG-1999; 99US-0149175P.
PR 18-AUG-1999; 99US-0149426P.
PR 20-AUG-1999; 99US-0149722P.
PR 20-AUG-1999; 99US-0149723P.
PR 20-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156458P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
PR 13-OCT-1999; 99US-0159294P.
PR 13-OCT-1999; 99US-0159295P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.
PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
PR 14-OCT-1999; 99US-0159638P.
PR 18-OCT-1999; 99US-0159584P.
PR 21-OCT-1999; 99US-0160741P.
PR 21-OCT-1999; 99US-0160767P.
PR 21-OCT-1999; 99US-0160768P.
PR 21-OCT-1999; 99US-0160770P.
PR 21-OCT-1999; 99US-0160814P.
PR 21-OCT-1999; 99US-0160815P.
PR 22-OCT-1999; 99US-0160980P.
PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 219;
Best Local Similarity 50.0%; Pred. No. 4.7e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 208 DQDLVSHI 215

RESULT 112
ABB11692
ID ABB11692 standard; peptide; 219 AA.
XX
AC ABB11692;
XX
DT 11-JAN-2002 (first entry)
XX
DE Human protein Tyr phosphatase homologue, SEQ ID NO:2062.
XX
KW Human; cytokine; cell proliferation; cell differentiation; growth factor;
KW haematopoiesis regulation; tissue growth; immunomodulator; activin;
KW inhibin; chemotaxis; chemokinesis; thrombolysis; oncogenesis;
KW proliferation; metastasis; cancer; tumour; haematopoietic disorder;
KW myeloid cell disorder; lymphoid cell disorder; asthma; arthritis;
KW chronic inflammatory condition; proliferative retinopathy;
KW atherosclerosis; coronary heart disease; arterial ischaemia;
KW bone disorder; osteoporosis; vascular growth disorder;
KW tissue regeneration; wound healing; infection; immune disorder;
KW cell culture; drug screening; gene therapy; antiinflammatory;
KW antiasthmatic; antiarthritic; haemostatic; antiarteriosclerotic;
KW cytostatic; osteopathic; vasotropic; cardiant; virucide; antibacterial;
KW antifungal; vulnerary; antiulcer.
XX
OS Homo sapiens.
XX
PN WO200157188-A2.
XX
PD 09-AUG-2001.
XX
PF 05-FEB-2001; 2001WO-US003800.
XX
PR 03-FEB-2000; 2000US-00496914.
PR 27-APR-2000; 2000US-00560875.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX
DR WPI; 2001-457740/49.
DR N-PSDB; ABA08936.
XX
PT Human proteins and DNA encoding sequences useful for preventing, treating
PT or ameliorating a medical condition in a mammalian subject e.g. arthritis
PT and cancer.
XX
PS Claim 20; Page 228-229; 1963pp; English.
XX
CC Sequences ABB10981-ABB12330 represent 1350 novel human polypeptides, and
CC sequences ABA08225-ABA09574 represent nucleic acids encoding them. The
CC invention also relates to vectors and recombinant host cells comprising a
CC nucleotide of the invention, methods of producing the novel polypeptides,

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CC   antibodies against the polypeptides, methods of detecting the nucleotides
CC   or polypeptides in a sample, and methods of identifying compounds which
CC   bind to polypeptides of the invention. Although novel, many of the
CC   polypeptides of the invention have homology to known proteins, thereby
CC   giving an insight into their probable biological activities, and hence
CC   potential therapeutic applications. The polypeptides of the invention may
CC   have various activities, including cytokine, cell proliferation or cell
CC   differentiation activities; stem cell growth factor activity;
CC   haematopoiesis regulatory activity; tissue growth activity;
CC   immunomodulatory activity; activin- or inhibin-related activities;
CC   chemotactic or chemokinetic activities; haemostatic, thrombotic or
CC   thrombolytic activities; receptor or ligand activities; or may be
CC   involved in oncogenesis, cancer cell proliferation or metastasis.
CC   Depending on their biological activities, polypeptides and nucleotides of
CC   the invention are useful for preventing, treating or ameliorating medical
CC   conditions, e.g., by protein or gene therapy. Such conditions include
CC   cancers, haematopoietic disorders (e.g.,myeloid or lymphoid cell
CC   disorders), chronic inflammatory conditions (e.g., asthma or arthritis),
CC   proliferative retinopathy, atherosclerosis, coronary heart disease,
CC   arterial ischaemia, bone disorders (e.g., osteoporosis), and abnormal
CC   vascular growth. Polypeptides involved with tissue regeneration and
CC   repair (or nucleic acids encoding them) may be used to promote wound
CC   healing (e.g., of burns, incisions and ulcers), while those with
CC   immunomodulatory activities may be used in the treatment of viral,
CC   bacterial and fungal infections in addition to immune disorders.
CC   Polypeptides with growth factor activity may be used in cell cultures to
CC   promote cell growth. For example, such polypeptides may be used to
CC   manipulate stem cells in culture to give rise to neuroepithelial cells
CC   that can be used to augment or replace cells damaged by illness,
CC   autoimmune disease or accidental damage. The polypeptides and nucleotides
CC   may also be used in the diagnosis of the above conditions, and in drug
CC   screening techniques. The present sequence represents a novel human
CC   polypeptide of the invention
XX
SQ   Sequence 219 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 219;
  Best Local Similarity   50.0%;  Pred. No. 4.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         82 FQGRVSHI 89


RESULT 113
AAM80190
ID   AAM80190 standard; protein; 219 AA.
XX
AC   AAM80190;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human protein SEQ ID NO 3836.
XX
KW   Human; cytokine; cell proliferation; cell differentiation; gene therapy;
KW   vaccine; peptide therapy; stem cell growth factor; haematopoiesis;
KW   tissue growth factor; immunomodulatory; cancer; leukaemia;
KW   nervous system disorder; arthritis; inflammation.
XX
OS   Homo sapiens.
XX
PN   WO200157190-A2.
XX
PD   09-AUG-2001.
XX
PF   05-FEB-2001; 2001WO-US004098.
XX
PR   03-FEB-2000; 2000US-00496914.
PR   27-APR-2000; 2000US-00560875.
PR   20-JUN-2000; 2000US-00598075.
PR   19-JUL-2000; 2000US-00620325.
PR   01-SEP-2000; 2000US-00654936.
PR   15-SEP-2000; 2000US-00663561.
PR   20-OCT-2000; 2000US-00693325.
PR   30-NOV-2000; 2000US-00728422.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Liu C,  Drmanac RT,  Asundi V,  Zhou P,  Xu C,  Cao Y;
PI   Ma Y,  Zhao QA,  Wang D,  Wang J,  Zhang J,  Ren F,  Chen R,  Wang ZW;
PI   Xue AJ,  Yang Y,  Wejhrman T,  Goodrich R;
XX
DR   WPI; 2001-476283/51.
DR   N-PSDB; AAK53323.
XX
PT   Nucleic acids encoding polypeptides with cytokine-like activities, useful
PT   in diagnosis and gene therapy.
XX
PS   Claim 20; Page 446; 6221pp; English.
XX
CC   The invention relates to polynucleotides (AAK51456-AAK53435) and the
CC   encoded polypeptides (AAM78323-AAM80302) that exhibit activity elating to
CC   cytokine, cell proliferation or cell differentiation or which may induce
CC   production of other cytokines in other cell populations. The
CC   polynucleotides and polypeptides are useful in gene therapy, vaccines or
CC   peptide therapy. The polypeptides have various cytokine-like activities,
CC   e.g. stem cell growth factor activity, haematopoiesis regulating
CC   activity, tissue growth factor activity, immunomodulatory activity and
CC   activin/inhibin activity and may be useful in the diagnosis and/or
CC   treatment of cancer, leukaemia, nervous system disorders, arthritis and
CC   inflammation. Note: Records for SEQ ID NO 2110 (AAK52581), 2111
CC   (AAK52582) and 3666 (AAM80020) are omitted as the relevant pages from the
CC   sequence listing were missing at the time of publication
XX
SQ   Sequence 219 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 219;
  Best Local Similarity   50.0%;  Pred. No. 4.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         82 FQGRVSHI 89


RESULT 114
ABG06039
ID   ABG06039 standard; protein; 219 AA.
XX
AC   ABG06039;
XX
DT   13-FEB-2002  (first entry)
XX
DE   Novel human diagnostic protein #6030.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   N-PSDB; AAS70226.
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XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 20; SEQ ID NO 36398; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC   amino acid sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 219 AA;

  Query Match          100.0%;  Score 25;  DB 4;  Length 219;
  Best Local Similarity   50.0%;  Pred. No. 4.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         82 FQGRVSHI 89


RESULT 115
ADA11866
ID   ADA11866 standard; protein; 219 AA.
XX
AC   ADA11866;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human novel secreted protein associated polypeptide #136.
XX
KW   cancer; inflammation; immune disorder; neurological disorder;
KW   blood clotting disorder; food additive; food preservative;
KW   storage capability; fat content; nutritional component; human;
KW   secreted protein.
XX
OS   Homo sapiens.
XX
PN   US2003055236-A1.
XX
PD   20-MAR-2003.
XX
PF   14-MAR-2002; 2002US-00097065.
XX
PR   18-DEC-1997;   97US-0068006P.
PR   18-DEC-1997;   97US-0068007P.
PR   18-DEC-1997;   97US-0068008P.
PR   18-DEC-1997;   97US-0068053P.
PR   18-DEC-1997;   97US-0068054P.
PR   18-DEC-1997;   97US-0068057P.
PR   18-DEC-1997;   97US-0068064P.
PR   18-DEC-1997;   97US-0070923P.
PR   19-DEC-1997;   97US-0068169P.
PR   19-DEC-1997;   97US-0068365P.
PR   19-DEC-1997;   97US-0068367P.
PR   19-DEC-1997;   97US-0068368P.
PR   19-DEC-1997;   97US-0068369P.
PR   17-DEC-1998;   98WO-US027059.
PR   17-JUN-1999;   99US-00334595.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Moore PA,  Ruben SM,  Carter KC,  Shi Y,  Rosen CA,  Soppet DR;
PI   Kyaw H,  Wei Y,  Florence KA,  Duan DR,  Florence C,  Greene JM,  Feng P;
PI   Ferrie AM,  Yu G,  Janat F,  Ni J;
XX
DR   WPI; 2003-567105/53.
XX
PT   New secreted HKABT24 nucleic acid molecules and polypeptides, useful for
PT   preventing, treating, or ameliorating a medical condition, such as
PT   cancer, inflammation, immune disorders, neurological and blood clotting
PT   disorders.
XX
PS   Disclosure; Page 18; 118pp; English.
XX
CC   The invention relates to an isolated HKABT24 nucleic acid molecule. The
CC   polypeptides, nucleic acids and antibodies are useful for diagnosing a
CC   pathological condition or a susceptibility to a pathological condition,
CC   for preventing, treating, or ameliorating a medical condition, such as
CC   cancer, inflammation and other immune disorders, neurological and blood
CC   clotting disorders. The nucleic acids are also useful for chromosome
CC   identification, radiation hybrid mapping or long-range restriction
CC   mapping. The polypeptides and antibodies are useful for providing
CC   immunological probes for differential identification of the tissues
CC   immunohistochemistry assays. The polypeptide, polynucleotide, agonist or
CC   antagonist may also be used as a food additive or preservative to
CC   increase or decrease storage capabilities, fat content or other
CC   nutritional components. The present sequence represents the amino acid
CC   sequence of a novel human secreted protein associated polypeptide. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification but was obtained in electronic format directly from USPTO
CC   at seqdata.uspto.gov.uk/sequence.html?DocID=20030055236.
XX
SQ   Sequence 219 AA;

  Query Match          100.0%;  Score 25;  DB 6;  Length 219;
  Best Local Similarity   62.5%;  Pred. No. 4.7e+03;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::||||
Db        199 LQITVXHI 206


RESULT 116
AAY36230
ID   AAY36230 standard; protein; 220 AA.
XX
AC   AAY36230;
XX
DT   17-SEP-1999  (first entry)
XX
DE   Human secreted protein encoded by gene 7.
XX
KW   Human; secreted protein; cancer; tumour; developmental abnormality;
KW   foetal deficiency; blood disorder; immune system disorder; inflammation;
KW   autoimmune disease; allergy; Alzheimer's disease; cognitive disorder;
KW   schizophrenia; arthritis; asthma; psoriasis; sepsis; skin disorder;
KW   atherosclerosis; diabetes; cardiovascular disorder; kidney disorder;
KW   digestive disorder; endocrine disorder; infection; AIDS.
XX
OS   Homo sapiens.
XX
PN   WO9931117-A1.
XX
PD   24-JUN-1999.
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XX
PF   17-DEC-1998;   98WO-US027059.
XX
PR   18-DEC-1997;   97US-0068006P.
PR   18-DEC-1997;   97US-0068007P.
PR   18-DEC-1997;   97US-0068008P.
PR   18-DEC-1997;   97US-0068053P.
PR   18-DEC-1997;   97US-0068054P.
PR   18-DEC-1997;   97US-0068057P.
PR   18-DEC-1997;   97US-0068064P.
PR   18-DEC-1997;   97US-0070923P.
PR   19-DEC-1997;   97US-0068169P.
PR   19-DEC-1997;   97US-0068365P.
PR   19-DEC-1997;   97US-0068367P.
PR   19-DEC-1997;   97US-0068368P.
PR   19-DEC-1997;   97US-0068369P.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Moore PA,  Ruben SM,  Carter KC,  Shi Y,  Rosen CA,  Soppet DR;
PI   Kyaw H,  Wei Y,  Florence K,  Duan RD,  Florence C,  Greene JM,  Feng P;
PI   Ferrie AM,  Yu G,  Janat F,  Ni J;
XX
DR   WPI; 1999-418749/35.
DR   N-PSDB; AAX97922.
XX
PT   New isolated human genes encoding secreted polypeptides.
XX
PS   Claim 11; Page 350; 537pp; English.
XX
CC   AAX97916 to AAX98029 represent 110 isolated human secreted protein genes.
CC   AAY36224 to AAY36727 represent the secreted proteins encoded by the 110
CC   human genes. The genes and their corresponding secreted polypeptides are
CC   useful for preventing, treating or ameliorating medical conditions, e.g.
CC   by protein or gene therapy. Also pathological conditions can be diagnosed
CC   by determining the amount of the new polypeptides in a sample or by
CC   determining the presence of mutations in the new genes. Specific uses are
CC   described for each of the 110 genes, based on which tissues they are most
CC   highly expressed in, and include developing products for the diagnosis or
CC   treatment of cancer, tumours, developmental abnormalities and foetal
CC   deficiencies, blood disorders, diseases of the immune system, autoimmune
CC   diseases, inflammation, allergies, Alzheimer's and cognitive disorders,
CC   schizophrenia, arthritis, asthma, psoriasis, sepsis, skin disorders,
CC   atherosclerosis, diabetes, cardiovascular disorders, kidney disorders,
CC   digestive/endocrine disorders, infections and AIDS. The polypeptides are
CC   also useful for identifying their binding partners. The sequences given
CC   in AAX97907 to AAX97915 and AAY36223 are used in the exemplification of
CC   the present invention
XX
SQ   Sequence 220 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 220;
  Best Local Similarity   62.5%;  Pred. No. 4.7e+03;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::||||
Db        199 LQITVXHI 206


RESULT 117
ABU51588
ID   ABU51588 standard; protein; 220 AA.
XX
AC   ABU51588;
XX
DT   07-MAY-2003  (first entry)
XX
DE   Helicobacter pylori selected interacting domain (SID) protein #932.
XX
KW   Protein-protein interaction; ulcer; selected interacting domain; SID.
XX
OS   Helicobacter pylori.
XX
PN   WO200266501-A2.
XX
PD   29-AUG-2002.
XX
PF   28-DEC-2001; 2001WO-EP015428.
XX
PR   02-JAN-2001; 2001US-0259302P.
XX
PA   (HYBR-) HYBRIGENICS.
PA   (INSP ) INST PASTEUR.
XX
PI   Legrain P,  Rain J,  Colland F,  De Reuse H,  Labigne A;
XX
DR   WPI; 2002-674910/72.
DR   N-PSDB; ABX66333.
XX
PT   New complexes of protein-protein interactions in Helicobacter pylori,
PT   useful for identifying modulating compounds for treating or preventing
PT   ulcers in mammals.
XX
PS   Claim 6; Page 310; 642pp; English.
XX
CC   The invention describes a complex of protein-protein interactions in
CC   Helicobacter pylori selected from 421 complexes given in the
CC   specification. The complex of protein-protein interactions are useful for
CC   screening for agents which modulate the interaction of proteins.
CC   Modulating compounds which binds to a targeted bacterial protein may be
CC   used for treating or preventing ulcers in a human or animal. This is the
CC   amino acid sequence of a selected interacting domain (SID), identified
CC   via protein-protein interactions. Note: Where the patent number printed
CC   at the top of the pages in the specification has obscured areas of
CC   protein sequence, the indexer has replaced the residue with an X to
CC   represent an illegible residue
XX
SQ   Sequence 220 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 220;
  Best Local Similarity   50.0%;  Pred. No. 4.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         59 RQVGVPHI 66


RESULT 118
ADA11720
ID   ADA11720 standard; protein; 220 AA.
XX
AC   ADA11720;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human novel secreted protein, SEQ ID NO 248.
XX
KW   cancer; inflammation; immune disorder; neurological disorder;
KW   blood clotting disorder; food additive; food preservative;
KW   storage capability; fat content; nutritional component; human;
KW   secreted protein.
XX
OS   Homo sapiens.
XX
PN   US2003055236-A1.
XX
PD   20-MAR-2003.
XX
PF   14-MAR-2002; 2002US-00097065.
XX
PR   18-DEC-1997;   97US-0068006P.
PR   18-DEC-1997;   97US-0068007P.
PR   18-DEC-1997;   97US-0068008P.
PR   18-DEC-1997;   97US-0068053P.
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PR   18-DEC-1997;   97US-0068054P.
PR   18-DEC-1997;   97US-0068057P.
PR   18-DEC-1997;   97US-0068064P.
PR   18-DEC-1997;   97US-0070923P.
PR   19-DEC-1997;   97US-0068169P.
PR   19-DEC-1997;   97US-0068365P.
PR   19-DEC-1997;   97US-0068367P.
PR   19-DEC-1997;   97US-0068368P.
PR   19-DEC-1997;   97US-0068369P.
PR   17-DEC-1998;   98WO-US027059.
PR   17-JUN-1999;   99US-00334595.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Moore PA,  Ruben SM,  Carter KC,  Shi Y,  Rosen CA,  Soppet DR;
PI   Kyaw H,  Wei Y,  Florence KA,  Duan DR,  Florence C,  Greene JM,  Feng P;
PI   Ferrie AM,  Yu G,  Janat F,  Ni J;
XX
DR   WPI; 2003-567105/53.
DR   N-PSDB; ADA11596.
XX
PT   New secreted HKABT24 nucleic acid molecules and polypeptides, useful for
PT   preventing, treating, or ameliorating a medical condition, such as
PT   cancer, inflammation, immune disorders, neurological and blood clotting
PT   disorders.
XX
PS   Claim 11; SEQ ID NO 248; 118pp; English.
XX
CC   The invention relates to an isolated HKABT24 nucleic acid molecule. The
CC   polypeptides, nucleic acids and antibodies are useful for diagnosing a
CC   pathological condition or a susceptibility to a pathological condition,
CC   for preventing, treating, or ameliorating a medical condition, such as
CC   cancer, inflammation and other immune disorders, neurological and blood
CC   clotting disorders. The nucleic acids are also useful for chromosome
CC   identification, radiation hybrid mapping or long-range restriction
CC   mapping. The polypeptides and antibodies are useful for providing
CC   immunological probes for differential identification of the tissues
CC   immunohistochemistry assays. The polypeptide, polynucleotide, agonist or
CC   antagonist may also be used as a food additive or preservative to
CC   increase or decrease storage capabilities, fat content or other
CC   nutritional components. The present sequence represents the amino acid
CC   sequence of a novel human secreted protein. Note: The sequence data for
CC   this patent did not form part of the printed specification but was
CC   obtained in electronic format directly from USPTO at
CC   seqdata.uspto.gov.uk/sequence.html?DocID=20030055236.
XX
SQ   Sequence 220 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 220;
  Best Local Similarity   62.5%;  Pred. No. 4.7e+03;
  Matches    5;  Conservative    3;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::||||
Db        199 LQITVXHI 206


RESULT 119
AAB41848
ID   AAB41848 standard; protein; 224 AA.
XX
AC   AAB41848;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human ORFX ORF1612 polypeptide sequence SEQ ID NO:3224.
XX
KW   Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW   vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW   anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW   immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW   hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW   antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW   antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW   neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW   cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW   cholesterol ester storage; systemic lupus erythematosus; infection;
KW   severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW   allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW   bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW   thrombosis; contraceptive.
XX
OS   Homo sapiens.
XX
PN   WO200058473-A2.
XX
PD   05-OCT-2000.
XX
PF   31-MAR-2000; 2000WO-US008621.
XX
PR   31-MAR-1999;   99US-0127607P.
PR   02-APR-1999;   99US-0127636P.
PR   05-APR-1999;   99US-0127728P.
PR   30-MAR-2000;  2000US-00540763.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach M;
XX
DR   WPI; 2000-602362/57.
DR   N-PSDB; AAC76057.
XX
PT   Novel nucleic acids and peptides derived from open reading frame X,
PT   useful for treating e.g. cancers, proliferative disorders,
PT   neurodegenerative disorders and cardiovascular disease.
XX
PS   Claim 11; Page 2433; 5507pp; English.
XX
CC   AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC   which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC   sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC   antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic;
CC   anticonvulsant; antiarthritic; immunosuppressant; immunostimulant;
CC   cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
CC   dermatological; immunosuppressive; antiinflammatory; antibacterial;
CC   antiviral; antifungal; antirheumatic; antithyroid; and antianaemic. The
CC   sequences can be used for determining the presence of or predisposition
CC   to, or preventing or treating pathological conditions associated with an
CC   ORFX-associated disorder. The nucleic acids can be used to express ORFX
CC   proteins in gene therapy vectors. The proteins and nucleic acids may be
CC   used to treat cancers, proliferative disorders, neurodegenerative
CC   disorders, osteoarthritis, graft vs host disease, cardiovascular disease,
CC   diabetes mellitus, hypertension, hypothyroidism, cholesterol ester
CC   storage, systemic lupus erythematosus, severe combined immunodeficiency
CC   (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune
CC   disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and
CC   cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to
CC   enhance coagulation; to inhibit thrombosis; and as a contraceptive
XX
SQ   Sequence 224 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 224;
  Best Local Similarity   50.0%;  Pred. No. 4.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        120 LQITVGHI 127


RESULT 120
AAG18324
ID   AAG18324 standard; protein; 224 AA.
XX
AC   AAG18324;
XX
```

DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 19683.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
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PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
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PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
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PR 18-JUN-1999; 99US-0139460P.
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PR 22-JUN-1999; 99US-0139899P.
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PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.

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PR   27-AUG-1999;   99US-0151066P.
PR   27-AUG-1999;   99US-0151080P.
PR   30-AUG-1999;   99US-0151303P.
PR   31-AUG-1999;   99US-0151438P.
PR   01-SEP-1999;   99US-0151930P.
PR   07-SEP-1999;   99US-0152363P.
PR   10-SEP-1999;   99US-0153070P.
PR   13-SEP-1999;   99US-0153758P.
PR   15-SEP-1999;   99US-0154018P.
PR   16-SEP-1999;   99US-0154039P.
PR   20-SEP-1999;   99US-0154779P.
PR   22-SEP-1999;   99US-0155139P.
PR   23-SEP-1999;   99US-0155486P.
PR   24-SEP-1999;   99US-0155659P.
PR   28-SEP-1999;   99US-0156458P.
PR   29-SEP-1999;   99US-0156596P.
PR   04-OCT-1999;   99US-0157117P.
PR   05-OCT-1999;   99US-0157753P.
PR   06-OCT-1999;   99US-0157865P.
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PR   13-OCT-1999;   99US-0159293P.
PR   13-OCT-1999;   99US-0159294P.
PR   13-OCT-1999;   99US-0159295P.
PR   14-OCT-1999;   99US-0159329P.
PR   14-OCT-1999;   99US-0159330P.
PR   14-OCT-1999;   99US-0159331P.
PR   14-OCT-1999;   99US-0159637P.
PR   14-OCT-1999;   99US-0159638P.
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PR   21-OCT-1999;   99US-0160741P.
PR   21-OCT-1999;   99US-0160767P.
PR   21-OCT-1999;   99US-0160768P.
PR   21-OCT-1999;   99US-0160770P.
PR   21-OCT-1999;   99US-0160814P.
PR   21-OCT-1999;   99US-0160815P.
PR   22-OCT-1999;   99US-0160980P.
PR   22-OCT-1999;   99US-0160981P.
PR   22-OCT-1999;   99US-0160989P.
PR   25-OCT-1999;   99US-0161404P.
PR   25-OCT-1999;   99US-0161405P.
PR   25-OCT-1999;   99US-0161406P.
PR   26-OCT-1999;   99US-0161359P.
PR   26-OCT-1999;   99US-0161360P.
PR   26-OCT-1999;   99US-0161361P.
PR   28-OCT-1999;   99US-0161920P.
PR   28-OCT-1999;   99US-0161992P.
PR   28-OCT-1999;   99US-0161993P.
PR   29-OCT-1999;   99US-0162142P.

  Query Match           100.0%;  Score 25;  DB 3;  Length 224;
  Best Local Similarity   50.0%;  Pred. No. 4.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        181 SQRKVNHI 188


RESULT 121
AAB42807
ID   AAB42807 standard; protein; 227 AA.
XX
AC   AAB42807;
XX
DT   08-FEB-2001  (first entry)
XX
DE   Human ORFX ORF2571 polypeptide sequence SEQ ID NO:5142.
XX
KW   Human; open reading frame; ORFX; detection; cytostatic; hepatotropic;
KW   vulnerary; antipsoriatic; antiparkinsonian; nootropic; neuroprotective;
KW   anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
KW   immunostimulant; thrombolytic; coagulant; vasotropic; antidiabetic;
KW   hypotensive; dermatological; immunosuppressive; antiinflammatory;
KW   antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
KW   antianaemic; gene therapy; cancer; proliferative disorder; hypertension;
KW   neurodegenerative disorder; osteoarthritis; graft vs host disease;
KW   cardiovascular disease; diabetes mellitus; hypothyroidism; SCID; AIDS;
KW   cholesterol ester storage; systemic lupus erythematosus; infection;
KW   severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
KW   allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
KW   bone damage; cartilage damage; antiinflammatory disease; coagulation;
KW   thrombosis; contraceptive.
XX
OS   Homo sapiens.
XX
PN   WO200058473-A2.
XX
PD   05-OCT-2000.
XX
PF   31-MAR-2000; 2000WO-US008621.
XX
PR   31-MAR-1999;   99US-0127607P.
PR   02-APR-1999;   99US-0127636P.
PR   05-APR-1999;   99US-0127728P.
PR   30-MAR-2000; 2000US-00540763.
XX
PA   (CURA-) CURAGEN CORP.
XX
PI   Shimkets RA,  Leach M;
XX
DR   WPI; 2000-602362/57.
DR   N-PSDB; AAC77016.
XX
PT   Novel nucleic acids and peptides derived from open reading frame X,
PT   useful for treating e.g. cancers, proliferative disorders,
PT   neurodegenerative disorders and cardiovascular disease.
XX
PS   Claim 11; Page 4326; 5507pp; English.
XX
CC   AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
CC   which represent the human ORFX open reading frames 1 to 3161. The ORFX
CC   sequences have activities such as: cytostatic; hepatotropic; vulnerary;
CC   antipsoriatic; antiparkinsonian; nootropic; neuroprotective; osteopathic;
CC   anticonvulsant; antiarthritic; immunosuppressant; immunostimulant;
CC   cardiant; thrombolytic; coagulant; vasotropic; antidiabetic; hypotensive;
CC   dermatological; immunosuppressive; antiinflammatory; antibacterial;
CC   antiviral; antifungal; antirheumatic; antithyroid; and antianaemic. The
CC   sequences can be used for determining the presence of or predisposition
CC   to, or preventing or treating pathological conditions associated with an
CC   ORFX-associated disorder. The nucleic acids can be used to express ORFX
CC   proteins in gene therapy vectors. The proteins and nucleic acids may be
CC   used to treat cancers, proliferative disorders, neurodegenerative
CC   disorders, osteoarthritis, graft vs host disease, cardiovascular disease,
CC   diabetes mellitus, hypertension, hypothyroidism, cholesterol ester
CC   storage, systemic lupus erythematosus, severe combined immunodeficiency
CC   (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune
CC   disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and
CC   cartilage damage, nocturnal haemoglobinuria, antiinflammatory disease; to
CC   enhance coagulation; to inhibit thrombosis; and as a contraceptive
XX
SQ   Sequence 227 AA;

  Query Match           100.0%;  Score 25;  DB 3;  Length 227;
  Best Local Similarity   50.0%;  Pred. No. 4.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        148 IQTYVEHI 155


RESULT 122
ABB61466
ID   ABB61466 standard; protein; 228 AA.
```

```
XX
AC   ABB61466;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster polypeptide SEQ ID NO 11190.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US009231.
XX
PR   23-MAR-2000; 2000US-0191637P.
PR   11-JUL-2000; 2000US-00614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   N-PSDB; ABL05569.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signaling and cell-cell
PT   interactions.
XX
PS   Disclosure; SEQ ID NO 11190; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-
CC   ABB72072). The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 228 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 228;
  Best Local Similarity   50.0%;  Pred. No. 4.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        139 IQAAVTHI 146


RESULT 123
AAY27341
ID   AAY27341 standard; protein; 229 AA.
XX
AC   AAY27341;
XX
DT   15-NOV-1999  (first entry)
XX
DE   Group B Streptococcus (GBS) antigen (clone 2).
XX
KW   Group B Streptococcus; GBS; antigen; vaccine; Streptococcus infection;
KW   sepsis; meningitis; pneumonia; immunocompromise; diabetes; liver disease;
KW   cancer; vetinary; mastitis.
XX
OS   Streptococcus sp.
XX
PN   WO9942588-A2.
XX
PD   26-AUG-1999.
XX
PF   17-FEB-1999;   99WO-CA000114.
XX
PR   20-FEB-1998;   98US-0075425P.
XX
PA   (BIOC-) BIOCHEM VACCINS INC.
XX
PI   Brodeur BR,  Rioux C,  Boyer M,  Charlebois I,  Hamel J,  Martin D;
XX
DR   WPI; 1999-540309/45.
DR   N-PSDB; AAX91104.
XX
PT   Novel group B Streptococcus antigens - useful as vaccine compositions for
PT   prophylaxis or therapy of Streptococcus infections.
XX
PS   Claim 26; Fig 2B; 154pp; English.
XX
CC   The invention provides Group B Streptococcus (GBS) antigens (AAY27336-
CC   370) and nucleic acids (AAX91103-X91111) encoding the antigens. The GBS
CC   antigens can be recombinantly expressed using standard recombinant
CC   methodology. The GBS antigens of the invention can be used as vaccine
CC   components for the treatment or prophylaxis of diseases and symptoms
CC   mediated by Streptococcus infection, especially group A Streptococcus (S.
CC   pyogenes), GBS or S. agalactiae, S. dysgalactiae, S. uberis, S. nocardia,
CC   as well as Staphylococcus aureus. The vaccines are administered to those
CC   individuals at risk of GBS infection, particularly pregnant women and
CC   infants for sepsis, meningitis, and pneumonia, as well as
CC   immunocompromised individuals, such as those with diabetes, liver disease
CC   or cancer. The vaccines also have vetinary applications, such as for the
CC   treatment of mastitis in cattle. The present sequence represents a GBS
CC   antigen of the invention
XX
SQ   Sequence 229 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 229;
  Best Local Similarity   50.0%;  Pred. No. 4.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        111 FQKDVEHI 118


RESULT 124
ABU20679
ID   ABU20679 standard; protein; 233 AA.
XX
AC   ABU20679;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #6206.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Bacteroides fragilis.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
```

PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX
DR WPI; 2003-029926/02.
DR N-PSDB; ACA24549.
XX
PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 25; SEQ ID NO 48603; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than S. aureus, S. typhimurium,
CC K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 233 AA;

Query Match 100.0%; Score 25; DB 6; Length 233;
Best Local Similarity 50.0%; Pred. No. 5e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 221 EQGAVKHI 228

RESULT 125
ABM67953
ID ABM67953 standard; protein; 234 AA.
XX
AC ABM67953;
XX
DT 20-NOV-2003 (first entry)
XX
DE Photorhabdus luminescens protein sequence #1050.
XX
KW Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
KW detection; food; gene expression; plant; animal; microorganism; toxin;
KW antibiotic; biopesticide; virulence factor; disease model; plague;
KW whooping cough.
XX
OS Photorhabdus luminescens.
XX
PN WO200294867-A2.
XX
PD 28-NOV-2002.
XX
PF 07-FEB-2002; 2002WO-IB003040.
XX
PR 07-FEB-2001; 2001FR-00001659.
XX
PA (INSP) INST PASTEUR.
PA (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Duchaud E, Taourit S, Glaser P, Frangeul L, Kunst F, Danchin A;
PI Buchrieser C;
XX
DR WPI; 2003-148459/14.
XX
PT Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
PT useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
PS Claim 2; SEQ ID NO 1050; 1205pp; French.
XX
CC The invention relates to the isolation of genes and their encoded
CC proteins from Photorhabdus luminescens. The isolated sequences are
CC sources of probes and primers for detecting the genome of P. luminescens
CC and related species; to study polymorphisms; for gene analysis and for
CC detection/amplification of the genes. Antibodies (Ab) raised against the
CC polypeptides encoded by the genes are used for detection/identification
CC of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
CC carry a gene-containing vector are used to select compounds that
CC modulate, regulate, induce or inhibit expression of the genes in plants,
CC animals or microorganisms other than P. luminescens and are able to alter
CC response or sensitivity to toxins and antibiotics produced by P.
CC luminescens. Cells transformed to express the genes are useful for
CC recombinant production of the proteins, particularly toxins and
CC antibacterials useful as insecticides, bactericides and fungicides. The
CC genes, proteins, vectors containing the genes and Ab are also useful
CC therapeutically (to treat microbial infection by bacteria or fungi that
CC are sensitive to P. luminescens-encoded toxins or antibiotics) and as
CC biopesticides. Other uses of the genes and the proteins are as virulence
CC factors and for identifying targets of human diseases for which P.
CC luminescens is a model (particularly plague and whooping cough). This
CC sequence represents one of the isolated P. luminescens proteins
XX
SQ Sequence 234 AA;

Query Match 100.0%; Score 25; DB 6; Length 234;
Best Local Similarity 50.0%; Pred. No. 5.1e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 157 QQVWVNHI 164

RESULT 126
ABP39305
ID ABP39305 standard; protein; 235 AA.
XX
AC ABP39305;
XX
DT 24-JUL-2002 (first entry)
XX
DE Staphylococcus epidermidis ORF amino acid sequence SEQ ID NO:4150.
XX
KW Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
KW antibacterial; gene therapy.
XX
OS Staphylococcus epidermidis.
XX
PN US6380370-B1.
XX
PD 30-APR-2002.
XX
PF 13-AUG-1998; 98US-00134001.

```
XX
PR   14-AUG-1997;   97US-0055779P.
PR   08-NOV-1997;   97US-0064964P.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Doucette-Stamm LA,  Bush D;
XX
DR   WPI; 2002-381255/41.
DR   N-PSDB; ABN91850.
XX
PT   Novel isolated nucleic acid encoding a Staphylococcus epidermis
PT   polypeptide, useful for diagnosing and treating bacterial infections.
XX
PS   Disclosure; SEQ ID NO 4150; 267pp; English.
XX
CC   ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading
CC   frame (ORF) nucleic acid sequences which encode the amino acid sequences
CC   given in ABP35124 to ABP37960. The S. epidermidis sequences have
CC   antibacterial activity and can be used in gene therapy. The sequences can
CC   also be used in the diagnosis and treatment of bacterial infections,
CC   particularly S. epidermidis infections. The sequences can be used to
CC   screen for compounds able to interfere with the S. epidermidis life cycle
CC   or inhibit S. epidermidis infection. N.B. The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from the USPTO web site
XX
SQ   Sequence 235 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 235;
  Best Local Similarity   50.0%;  Pred. No. 5.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        176 AQYAVDHI 183


RESULT 127
ABB67392
ID   ABB67392 standard; protein; 238 AA.
XX
AC   ABB67392;
XX
DT   26-MAR-2002  (first entry)
XX
DE   Drosophila melanogaster polypeptide SEQ ID NO 28968.
XX
KW   Drosophila; developmental biology; cell signalling; insecticide;
KW   pharmaceutical.
XX
OS   Drosophila melanogaster.
XX
PN   WO200171042-A2.
XX
PD   27-SEP-2001.
XX
PF   23-MAR-2001; 2001WO-US009231.
XX
PR   23-MAR-2000; 2000US-0191637P.
PR   11-JUL-2000; 2000US-00614150.
XX
PA   (PEKE ) PE CORP NY.
XX
PI   Venter JC,  Adams M,  Li PWD,  Myers EW;
XX
DR   WPI; 2001-656860/75.
DR   N-PSDB; ABL11495.
XX
PT   New isolated nucleic acid detection reagent for detecting 1000 or more
PT   genes from Drosophila and for elucidating cell signaling and cell-cell
PT   interactions.
XX
PS   Disclosure; SEQ ID NO 28968; 21pp + Sequence Listing; English.
XX
CC   The invention relates to an isolated nucleic acid detection reagent
CC   capable of detecting 1000 or more genes from Drosophila. The invention is
CC   useful in developmental biology and in elucidating cell signalling and
CC   cell-cell interactions in higher eukaryotes for the development of
CC   insecticides, therapeutics and pharmaceutical drugs. The invention
CC   discloses genomic DNA sequences (ABL16176-ABL30511), expressed DNA
CC   sequences (ABL01840-ABL16175) and the encoded proteins (ABB57737-
CC   ABB72072). The sequence data for this patent did not form part of the
CC   printed specification, but was obtained in electronic format directly
CC   from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 238 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 238;
  Best Local Similarity   50.0%;  Pred. No. 5.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         86 AQFHVFHI 93


RESULT 128
AAU25571
ID   AAU25571 standard; protein; 239 AA.
XX
AC   AAU25571;
XX
DT   18-DEC-2001  (first entry)
XX
DE   Human G Protein-Coupled Receptor (GPCR) polypeptide #18.
XX
KW   Human; G-protein coupled receptor; GPCR; mental disorder; schizophrenia;
KW   attention deficit disorder; anxiety; depression; bipolar disorder;
KW   neurological disorder; Huntington's disease; dementia; obesity; anorexia;
KW   metabolic disorder; Parkinson's disease; Tourette's syndrome; thrombosis;
KW   type 2 diabetes; cardiovascular disorder; myocardial infarction; cancer;
KW   cardiomyopathy; atherosclerosis; human immunodeficiency virus; HIV;
KW   viral infection; immunostimulant; neuroleptic; nootropic; tranquiliser;
KW   antidepressant; anorectic; gene therapy.
XX
OS   Homo sapiens.
XX
PN   WO200162797-A2.
XX
PD   30-AUG-2001.
XX
PF   23-FEB-2001; 2001WO-US005676.
XX
PR   23-FEB-2000; 2000US-0184247P.
PR   23-FEB-2000; 2000US-0184303P.
PR   23-FEB-2000; 2000US-0184304P.
PR   23-FEB-2000; 2000US-0184305P.
PR   23-FEB-2000; 2000US-0184397P.
PR   02-MAR-2000; 2000US-0186457P.
PR   03-MAR-2000; 2000US-0186810P.
PR   09-MAR-2000; 2000US-0188064P.
PR   13-MAR-2000; 2000US-0188880P.
PR   03-APR-2000; 2000US-0194344P.
PR   23-JUN-2000; 2000US-0213861P.
PR   11-JUL-2000; 2000US-0217369P.
PR   11-JUL-2000; 2000US-0217370P.
PR   14-JUL-2000; 2000US-0218337P.
PR   20-JUL-2000; 2000US-0218492P.
XX
PA   (PHAA ) PHARMACIA & UPJOHN CO.
XX
PI   Vogeli G,  Wood LS,  Parodi LA,  Lind P;
XX
DR   WPI; 2001-570628/64.
DR   N-PSDB; AAS42823.
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```
XX
PT   New isolated nucleic acid encoding a new G-protein coupled receptor
PT   polypeptide for detecting receptor modulators that can treat mental
PT   disorders, such as schizophrenia, anxiety, depression, or obesity.
XX
PS   Claim 35; Page 77; 279pp; English.
XX
CC   Sequences AAU25554-AAU25616 represent human G-protein coupled receptor
CC   (GPCR) polypeptides of the invention. The proteins and their associated
CC   DNA sequences can be used to identify compounds which bind to GPCR
CC   polypeptides and in screening for compounds that modulate GPCR activity.
CC   By screening a human subject for the presence of mutations in GPCR DNA, a
CC   GPCR-related disorder or a genetic predisposition can be diagnosed. The
CC   sequences can also be used for treatment and prevention of mental
CC   disorders such as schizophrenia, attention deficit disorder, anxiety,
CC   depression, dementia and bipolar disorder, neurological disorders such as
CC   Huntington's disease, Parkinson's disease and Tourette's syndrome,
CC   metabolic disorders such as obesity, anorexia and type 2 diabetes,
CC   cardiovascular disorders such as thrombosis, myocardial infarction,
CC   cardiomyopathy and atherosclerosis, viral infections caused by HIV and
CC   cancers
XX
SQ   Sequence 239 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 239;
  Best Local Similarity   50.0%;  Pred. No. 5.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        116 SQGQVIHI 123


RESULT 129
AAU14717
ID   AAU14717 standard; protein; 239 AA.
XX
AC   AAU14717;
XX
DT   24-OCT-2001  (first entry)
XX
DE   Novel bone marrow polypeptide #116.
XX
KW   Bone marrow; diagnostic; therapeutic; gene therapy; antigenic;
KW   haematopoiesis; myeloid; lymph cell disorder; tissue regeneration;
KW   wound healing; nutritional supplement; immune disorder;
KW   severe combined immunodeficiency; SCID.
XX
OS   Homo sapiens.
XX
PN   WO200157187-A2.
XX
PD   09-AUG-2001.
XX
PF   05-FEB-2001; 2001WO-US003782.
XX
PR   03-FEB-2000; 2000US-00496914.
PR   20-JUN-2000; 2000US-00598075.
PR   19-JUL-2000; 2000US-00620325.
PR   30-NOV-2000; 2000US-0250683P.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Ford JE,  Boyle BJ,  Tang YT,  Liu C,  Asundi V,  Zhou P,  Xue AJ;
PI   Ren F,  Drmanac RT;
XX
DR   WPI; 2001-488875/53.
DR   N-PSDB; AAS23022.
XX
PT   Nucleic acids encoding bone marrow polypeptides, useful in diagnostic and
PT   gene therapy.
XX
PS   Claim 10; Page 129; 392pp; English.
XX
CC   AAU14602-AAU14794 represent novel bone marrow polypeptides of the
CC   invention. The proteins and corresponding coding sequences may be used in
CC   the prevention, diagnosis and treatment of diseases associated with
CC   inappropriate bone marrow polypeptide expression. For example, to treat
CC   disorders associated with decreased expression by rectifying mutations or
CC   deletions in a patient's genome that affect the activity of the
CC   polypeptides by expressing inactive proteins or to supplement the
CC   patient's own production of the polypeptide. Additionally, the nucleic
CC   acids may be used to produce the polypeptides, by inserting the nucleic
CC   acids into a host cell and culturing the cell to express the protein. The
CC   nucleic acid and its complementary sequences may also be used as DNA
CC   probes in diagnostic assays to detect and quantitate the presence of
CC   similar nucleic acid sequences in samples, and therefore which patients
CC   may be in need of restorative therapy. The proteins may also be used as
CC   antigens in the production of antibodies against bone marrow proteins and
CC   in assays to identify modulators of their expression and activity. The
CC   anti-bone marrow protein antibodies and antagonists may also be used to
CC   down regulate expression and activity. The antibodies may also be used as
CC   diagnostic agents for detecting the presence of the protein in samples
CC   (e.g. by enzyme linked immunosorbant assay (ELISA)). The proteins may be
CC   used to regulate haematopoiesis activity, and consequently in the
CC   treatment of myeloid or lymph cell disorders; in tissue regeneration,
CC   such as wound healing; as a nutritional supplement; and in treatment of
CC   immune disorders such as severe combined immunodeficiency (SCID)
XX
SQ   Sequence 239 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 239;
  Best Local Similarity   50.0%;  Pred. No. 5.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        154 EQGLVSHI 161


RESULT 130
AAU74333
ID   AAU74333 standard; protein; 239 AA.
XX
AC   AAU74333;
XX
DT   12-MAR-2002  (first entry)
XX
DE   Human cytoskeleton-associated protein (CYSKP) #4.
XX
KW   Human; cytoskeleton-associated protein; CYSKP; autoimmune disorder;
KW   cell proliferative disorder; inflammatory disorder; prion disease;
KW   vesicle trafficking disorder; gastrointestinal disorder; muscle disorder;
KW   neurological disorder; cell motility disorder; reproductive disorder;
KW   spinal cord disease; central nervous system disorder; mental disorder;
KW   gene therapy; cancer.
XX
OS   Homo sapiens.
XX
PN   WO200185942-A2.
XX
PD   15-NOV-2001.
XX
PF   03-MAY-2001; 2001WO-US014355.
XX
PR   05-MAY-2000; 2000US-0201960P.
PR   08-MAY-2000; 2000US-0202729P.
PR   05-JUN-2000; 2000US-0209705P.
PR   07-JUN-2000; 2000US-0210149P.
PR   21-JUN-2000; 2000US-0213215P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Yue H,  Tang YT,  Au-Young J,  Lu DAM,  Baughn MR,  Hillman JL;
PI   Azimzai Y,  Lal P,  Yao MG,  Bandman O,  Burford N,  Batra S,  Kearney L;
PI   Policky JL;
```

XX
DR WPI; 2002-062248/08.
DR N-PSDB; AAS99893.
XX
PT New cytoskeleton-associated proteins and polynucleotides, useful for
PT diagnosing, preventing and treating cell proliferative, autoimmune,
PT inflammatory, neurological, cell motility, reproductive and muscle
PT disorders.
XX
PS Claim 1; Page 129; 194pp; English.
XX
CC The invention relates to human cytoskeleton-associated polypeptides
CC (CYSKP) and their associated polynucleotide sequences. The sequences are
CC useful in the treatment of disorders associated with overexpression or
CC underexpression of CYSKP in a patient. The disorders include cell
CC proliferative disorders (such as cancer, actinic keratosis,
CC arteriosclerosis, cirrhosis, hepatitis and psoriasis),
CC autoimmune/inflammatory disorders (such as, asthma, atherosclerosis,
CC osteoporosis, Crohn's disease, rheumatoid arthritis, diabetes mellitus
CC and anaemia), vesicle trafficking disorders (such as
CC hypercholesterolaemia, diabetes insipidus, Grave's disease and goitre),
CC gastrointestinal disorders, prion diseases, neurological disorders (such
CC as epilepsy, stroke, cerebral neoplasms, Alzheimer's disease,
CC Huntington's disease, Parkinson's disease, amyotrophic lateral sclerosis
CC and other motor neuron disorders), cell motility disorders, reproductive
CC disorders (such as endometriosis and polycystic ovary syndrome), muscle
CC disorders (such as myocarditis, migraine, hypertension, hypoglycaemia,
CC myocardial infarction, epilepsy and muscular dystrophy), spinal cord
CC diseases, central nervous system disorders (such as Down syndrome and
CC cerebral palsy) and mental disorders (such as anxiety and schizophrenia).
CC Sequences AAU74330-AAU74363 represent human CYSKP of the invention
XX
SQ Sequence 239 AA;

Query Match 100.0%; Score 25; DB 5; Length 239;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 172 IQTYVEHI 179

RESULT 131
AAB94472
ID AAB94472 standard; protein; 240 AA.
XX
AC AAB94472;
XX
DT 26-JUN-2001 (first entry)
XX
DE Human protein sequence SEQ ID NO:15137.
XX
KW Human; primer; detection; diagnosis; antisense therapy; gene therapy.
XX
OS Homo sapiens.
XX
PN EP1074617-A2.
XX
PD 07-FEB-2001.
XX
PF 28-JUL-2000; 2000EP-00116126.
XX
PR 29-JUL-1999; 99JP-00248036.
PR 27-AUG-1999; 99JP-00300253.
PR 11-JAN-2000; 2000JP-00118776.
PR 02-MAY-2000; 2000JP-00183767.
PR 09-JUN-2000; 2000JP-00241899.
XX
PA (HELI-) HELIX RES INST.
XX
PI Ota T, Isogai T, Nishikawa T, Hayashi K, Saito K, Yamamoto J;
PI Ishii S, Sugiyama T, Wakamatsu A, Nagai K, Otsuki T;
XX
DR WPI; 2001-318749/34.
XX
PT Primer sets for synthesizing polynucleotides, particularly the 5602 full-
PT length cDNAs defined in the specification, and for the detection and/or
PT diagnosis of the abnormality of the proteins encoded by the full-length
PT cDNAs.
XX
PS Claim 8; SEQ ID NO 15137; 2537pp + Sequence Listing; English.
XX
CC The present invention describes primer sets for synthesising 5602 full-
CC length cDNAs defined in the specification. Where a primer set comprises:
CC (a) an oligo-dT primer and an oligonucleotide complementary to the
CC complementary strand of a polynucleotide which comprises one of the 5602
CC nucleotide sequences defined in the specification, where the
CC oligonucleotide comprises at least 15 nucleotides; or (b) a combination
CC of an oligonucleotide comprising a sequence complementary to the
CC complementary strand of a polynucleotide which comprises a 5'-end
CC sequence and an oligonucleotide comprising a sequence complementary to a
CC polynucleotide which comprises a 3'-end sequence, where the
CC oligonucleotide comprises at least 15 nucleotides and the combination of
CC the 5'-end sequence/3'-end sequence is selected from those defined in the
CC specification. The primer sets can be used in antisense therapy and in
CC gene therapy. The primers are useful for synthesising polynucleotides,
CC particularly full-length cDNAs. The primers are also useful for the
CC detection and/or diagnosis of the abnormality of the proteins encoded by
CC the full-length cDNAs. The primers allow obtaining of the full-length
CC cDNAs easily without any specialised methods. AAH03166 to AAH13628 and
CC AAH13633 to AAH18742 represent human cDNA sequences; AAB92446 to AAB95893
CC represent human amino acid sequences; and AAH13629 to AAH13632 represent
CC oligonucleotides, all of which are used in the exemplification of the
CC present invention
XX
SQ Sequence 240 AA;

Query Match 100.0%; Score 25; DB 4; Length 240;
Best Local Similarity 50.0%; Pred. No. 5.2e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 32 KQKGVFHI 39

RESULT 132
AAU30407
ID AAU30407 standard; protein; 240 AA.
XX
AC AAU30407;
XX
DT 18-DEC-2001 (first entry)
XX
DE Novel human secreted protein #898.
XX
KW Human; vaccination; gene therapy; nutritional supplement;
KW stem cell proliferation; haematopoiesis; nerve tissue regeneration;
KW immune suppression; immune stimulation; anti-inflammatory; leukaemia.
XX
OS Homo sapiens.
XX
PN WO200179449-A2.
XX
PD 25-OCT-2001.
XX
PF 16-APR-2001; 2001WO-US008656.
XX
PR 18-APR-2000; 2000US-00552929.
PR 26-JAN-2001; 2001US-00770160.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang YT, Liu C, Drmanac RT;
XX

```
DR   WPI; 2001-611725/70.
XX
PT   Nucleic acids encoding a range of human polypeptides, useful in genetic
PT   vaccination, testing and therapy.
XX
PS   Claim 20; Page 290; 765pp; English.
XX
CC   The invention relates to novel human secreted polypeptides. The
CC   polypeptides and antibodies to the polypeptides are useful for
CC   determining the presence of or predisposition to a disease associated
CC   with altered levels of polypeptide. The polypeptides are also useful for
CC   identifying agents (agonists and antagonists) that bind to them. Cells
CC   expressing the proteins are useful for identifying a therapeutic agent
CC   for use in treatment of a pathology related to aberrant expression or
CC   physiological interactions of the polypeptide. Vectors comprising the
CC   nucleic acids encoding the polypeptides and cells genetically engineered
CC   to express them are also useful for producing the proteins. The proteins
CC   are useful in genetic vaccination, testing and therapy, and can be used
CC   as nutritional supplements. They may be used to increase stem cell
CC   proliferation; to regulate haematopoiesis; and in bone, cartilage, tendon
CC   and/or nerve tissue growth or regeneration; immune suppression and/or
CC   stimulation; as anti-inflammatory agents; and in treatment of leukaemias.
CC   AAU29510-AAU33304 represent the amino acid sequences of novel human
CC   secreted proteins of the invention
XX
SQ   Sequence 240 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 240;
  Best Local Similarity   50.0%;  Pred. No. 5.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        102 NQFRVDHI 109


RESULT 133
ABR01767
ID   ABR01767 standard; protein; 240 AA.
XX
AC   ABR01767;
XX
DT   22-APR-2003  (first entry)
XX
DE   Human breast specific polypeptide #82.
XX
KW   Human; breast specific nucleic acid; BSNA; breast; cytostatic;
KW   gene therapy; vaccines; lung cancer; breast cancer;
KW   breast specific polypeptide; BSP.
XX
OS   Homo sapiens.
XX
PN   WO200268645-A2.
XX
PD   06-SEP-2002.
XX
PF   20-NOV-2001; 2001WO-US045151.
XX
PR   20-NOV-2000; 2000US-0249992P.
XX
PA   (DIAD-) DIADEXUS INC.
XX
PI   Salceda S,  Macina RA,  Recipon H,  Cafferkey R,  Sun Y,  Liu C;
PI   Turner LR;
XX
DR   WPI; 2002-713379/77.
XX
PT   New breast specific genes and proteins, useful in gene therapy or as
PT   vaccines for treating breast cancer or non-cancerous breast diseases, as
PT   well as for diagnosing, monitoring or staging these diseases.
XX
PS   Claim 11; Page 265; 277pp; English.
XX
CC   The invention relates to a novel isolated breast specific nucleic acid
CC   molecule. The polypeptides of the invention have cytostatic activity. The
CC   novel nucleic acids and polypeptides may have a use in gene therapy, and
CC   as vaccines. The breast specific nucleic acid and polypeptide are useful
CC   for diagnosing and monitoring the presence and metastases of lung cancer
CC   in a patient. The antibody that specifically binds to the breast specific
CC   polypeptide is useful for determining the presence of a breast specific
CC   protein in a sample, as well as for treating a patient with breast
CC   cancer, particularly by inducing an immune response against the breast
CC   cancer cell expressing the breast specific nucleic acid molecule or
CC   polypeptide. In particular, these breast specific genes and proteins are
CC   useful for identifying, diagnosing, monitoring, staging, imaging and
CC   treating breast cancer and non-cancerous disease states in breast tissue.
CC   These are also useful in gene therapy, production of transgenic animals
CC   and cells, and in the production of engineered breast tissue for
CC   treatment and research. The sequences shown in ABR01686-ABR01788
CC   represent the novel human breast specific polypeptides of the invention
XX
SQ   Sequence 240 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 240;
  Best Local Similarity   50.0%;  Pred. No. 5.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 134
ABU00151
ID   ABU00151 standard; protein; 240 AA.
XX
AC   ABU00151;
XX
DT   17-JAN-2003  (first entry)
XX
DE   Human novel polypeptide #244.
XX
KW   Human; genetic disorder; gene mapping; medical imaging; cancer;
KW   neurodegenerative disorder; lymphoid cell disorder; osteoporosis;
KW   Parkinson's disease; Alzheimer's disease; bone degenerative disorder;
KW   osteoarthritis; periodontal disease; liver fibrosis; viral infection;
KW   fungal infection; bacterial infection; autoimmune disease; diabetes;
KW   atopic dermatitis.
XX
OS   Homo sapiens.
XX
PN   WO200274961-A1.
XX
PD   26-SEP-2002.
XX
PF   14-MAR-2002; 2002WO-US005109.
XX
PR   15-MAR-2001; 2001US-00810173.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Tang YT,  Zhou P,  Goodrich R,  Asundi V,  Zhang J,  Zhao QA,  Ren F;
PI   Xue AJ,  Yang Y,  Ma Y,  Yamazaki V,  Chen R,  Wang Z,  Ghosh M;
PI   Wehrman T,  Wang J,  Wang D,  Drmanac RT;
XX
DR   WPI; 2003-040556/03.
DR   N-PSDB; ABX05229.
XX
PT   New isolated polypeptides and polynucleotides, useful for preventing,
PT   treating or ameliorating medical conditions, such as cancer,
PT   neurodegenerative disorders, lymphoid cell disorders, bone degenerative
PT   disorders, and infections.
XX
PS   Claim 9; SEQ ID NO 770; 235pp; English.
XX
CC   The invention relates to human polynucleotides and the polypeptides they
```

```
CC   encode. The polynucleotides and polypeptides are useful in diagnostics,
CC   forensics, gene mapping, medical imaging, identification of mutations
CC   responsible for genetic disorders or other traits, assessing biodiversity
CC   and producing many other types of data and products dependent on DNA and
CC   amino acid sequences. They are also useful for preventing, treating or
CC   ameliorating medical conditions, such as cancer, neurodegenerative
CC   disorders (e.g. Parkinson's disease, Alzheimer's disease), lymphoid cell
CC   disorders, osteoporosis, osteoarthritis, bone degenerative disorders,
CC   periodontal disease, liver fibrosis, infections (e.g. viral, fungal or
CC   bacterial) or autoimmune diseases (e.g. diabetes, atopic dermatitis).
CC   Sequences ABG99888-ABG99989 and ABU00010-ABU00433 represent human
CC   polypeptides of the invention. Note: The sequence data for this patent is
CC   not represented in the printed specification but is based on sequence
CC   information supplied by the European Patent Office
XX
SQ   Sequence 240 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 240;
  Best Local Similarity   50.0%;  Pred. No. 5.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         32 KQKGVFHI 39


RESULT 135
AAW77619
ID   AAW77619 standard; protein; 244 AA.
XX
AC   AAW77619;
XX
DT   30-OCT-1998  (first entry)
XX
DE   Mercuric reductase protein.
XX
KW   Staphylococcus aureus protein; immune response induction; eye infection;
KW   antibody production; T-cell immune response; gastrointestinal infection;
KW   respiratory infection; inhibitor; bacterial infection; cardiac infection;
KW   central nervous system; kidney infection; urinary tract infection;
KW   antimicrobial compound identification; broad spectrum antibiotic;
KW   therapy.
XX
OS   Staphylococcus aureus.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 1. .244
FT                   /note= "residues designated X are unspecified, and
FT                   represented as Xaa in the specification"
XX
PN   EP841394-A2.
XX
PD   13-MAY-1998.
XX
PF   24-SEP-1997;   97EP-00307485.
XX
PR   24-SEP-1996;   96US-0027032P.
XX
PA   (SMIK ) SMITHKLINE BEECHAM CORP.
PA   (SMIK ) SMITHKLINE BEECHAM PLC.
XX
PI   Black MT,  Hodgson JE,  Knowles DJC,  Reichard RW,  Nicholas RO;
PI   Burnham MKR,  Pratt JM,  Rosenberg M,  Ward JM,  Lonetto MA;
XX
DR   WPI; 1998-252940/23.
DR   N-PSDB; AAV53414.
XX
PT   New nucleic acid sequences from Staphylococcus aureus WCHU29 - useful in
PT   vaccines and for treatment of bacterial infections of e.g. respiratory
PT   tract and central nervous system.
XX
PS   Claim 11; Page 288-289; 390pp; English.
XX
CC   This sequence represents a Staphylococcus aureus protein, that based on
CC   homology with a Staphylococcus aureus protein, is a mercuric reductase
CC   (Ec 1.16.1.1) (Hg(Ii) reductase), and is encoded by a DNA sequence of the
CC   invention. The DNA sequences were isolated from Staphylococcus aureus
CC   WCHU29 (NCIMB 40771). Host cells containing the DNA sequences are used to
CC   produce polypeptides or fragments. The proteins are used in the treatment
CC   of disease, for inducing an immune response by administering them, to
CC   produce antibody and/or T-cell immune response. Antagonists of the
CC   proteins are used for the inhibition of bacterial polypeptides.
CC   Conditions which may be treated include bacterial infections, especially
CC   respiratory, cardiac, gastrointestinal, central nervous, eye, kidney,
CC   urinary tract, skin, bones and joints. The proteins can also be used to
CC   identify antimicrobial compounds which are broad spectrum antibiotics,
CC   especially useful in the treatment of H. pylori infection
XX
SQ   Sequence 244 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 244;
  Best Local Similarity   50.0%;  Pred. No. 5.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         91 LQTSVPHI 98


RESULT 136
ABG70228
ID   ABG70228 standard; protein; 244 AA.
XX
AC   ABG70228;
XX
DT   21-OCT-2002  (first entry)
XX
DE   Human prey protein for Shigella ospG #14.
XX
KW   Prey protein; ospB; ospD1; ipaD; ipaC; ipaH9.8; ospG; ospC1; Shigella;
KW   shigellosis; bacillary dysentery; antibacterial; yeast two-hybrid system;
KW   protein-protein interaction; SID; selected interacting domain; human.
XX
OS   Homo sapiens.
XX
PN   WO200257303-A2.
XX
PD   25-JUL-2002.
XX
PF   11-JAN-2002; 2002WO-EP000777.
XX
PR   12-JAN-2001; 2001US-0261130P.
XX
PA   (HYBR-) HYBRIGENICS.
XX
PI   Legrain P;
XX
DR   WPI; 2002-599706/64.
DR   N-PSDB; ABS51621.
XX
PT   New complex of protein-protein interactions between a bait Shigella
PT   flexneri polypeptide and a prey mammalian or human placenta polypeptide
PT   for treating or preventing bacillary dysentery in a mammal or human.
XX
PS   Claim 7; Page 140; 162pp; English.
XX
CC   The invention relates to a complex of protein-protein interactions
CC   between a Shigella flexneri polypeptide (e.g. ospB, ospD1, ipaD, ipaC,
CC   ipaH9.8, ospG and ospC1) and a mammalian polypeptide defined in the
CC   specification. The complexes are formed using the yeast two-hybrid
CC   system. Also included are (1) a recombinant host cell expressing the
CC   interactions between the Shigella flexneri polypeptide and a mammalian
CC   polypeptide defined in the specification; (2) selecting a modulating
CC   compound that inhibits or activates the protein-protein interactions; (3)
CC   a modulating compound obtained from the method of (2); (4) a SID
CC   (selected interacting domain) polypeptide or its fragment or variant
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CC   comprising the human polypeptides appearing as ABG70042-ABG70242; (5) a
CC   SID polynucleotide or its fragment or variant comprising encoding the
CC   above polypeptides a vector comprising (5); (6) a recombinant host cell
CC   containing the vector; and (10) a protein chip comprising Shigella
CC   flexneri polypeptide and a mammalian polypeptide defined in the
CC   specification. A pharmaceutical composition comprising the compound,
CC   polypeptide or polynucleotide is useful for treating or preventing
CC   shigellosis (bacillary dysentery) in a human or mammal. The present
CC   sequence represents a human prey protein isolated by the yeast two-hybrid
CC   assay, forming a complex of the invention with a shigella protein
XX
SQ   Sequence 244 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 244;
  Best Local Similarity   50.0%;  Pred. No. 5.3e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        235 AQPAVQHI 242


RESULT 137
AAW64220
ID   AAW64220 standard; protein; 245 AA.
XX
AC   AAW64220;
XX
DT   06-OCT-1998  (first entry)
XX
DE   Human secreted protein from clone CG300_3.
XX
KW   Secreted protein; human adult testes; nutrition; cytokine; stimulant;
KW   cell proliferation; differentiation; immune system; suppressor; ligand;
KW   regulator; hematopoiesis; tissue growth; activin; inhibin; haemostatic;
KW   chemotaxis; chemokinetic; thrombosis; receptor; cadherin; tumour;
KW   anti-inflammatory.
XX
OS   Homo sapiens.
XX
PN   WO9827205-A2.
XX
PD   25-JUN-1998.
XX
PF   17-DEC-1997;   97WO-US023330.
XX
PR   18-DEC-1996;   96US-00769192.
PR   13-JAN-1997;   97US-00783401.
PR   16-DEC-1997;   97US-00991872.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Racie LA,  Merberg D,  Treacy M;
PI   Spaulding V,  Agostino MJ;
XX
DR   WPI; 1998-362774/31.
DR   N-PSDB; AAV44294.
XX
PT   New polynucleotides and secreted proteins - obtained from human foetal
PT   brain, human adult testes, human adult brain and human adult salivary
PT   gland cDNA libraries.
XX
PS   Claim 14j; Page 68; 110pp; English.
XX
CC   This sequence represents a novel secreted protein from clone CG300_3
CC   isolated from a human adult testes cDNA library. This protein has
CC   applications for nutritional use, cytokine and cell
CC   proliferation/differentiation activity, immune stimulating or suppressing
CC   activity, hematopoiesis regulating activity, tissue growth activity,
CC   activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic
CC   and thrombotic activity, receptor/ligand activity, anti-inflammatory
CC   activity, cadherin/tumour invasion suppressor activity, tumour inhibition
CC   activity and other activities
XX
SQ   Sequence 245 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 245;
  Best Local Similarity   50.0%;  Pred. No. 5.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        127 EQWAVIHI 134


RESULT 138
AAM93721
ID   AAM93721 standard; protein; 245 AA.
XX
AC   AAM93721;
XX
DT   06-NOV-2001  (first entry)
XX
DE   Human polypeptide, SEQ ID NO: 3671.
XX
KW   Human; full length cDNA; cDNA synthesis; oligo-capping.
XX
OS   Homo sapiens.
XX
PN   EP1130094-A2.
XX
PD   05-SEP-2001.
XX
PF   07-JUL-2000; 2000EP-00114089.
XX
PR   08-JUL-1999;   99JP-00194486.
PR   11-JAN-2000; 2000JP-00118774.
PR   02-MAY-2000; 2000JP-00183765.
XX
PA   (HELI-) HELIX RES INST.
XX
PI   Ota T,  Nishikawa T,  Isogai T,  Hayashi K,  Ishii S,  Kawai Y;
PI   Wakamatsu A,  Sugiyama T,  Nagai K,  Kojima S,  Otsuki T,  Koga H;
XX
DR   WPI; 2001-524255/58.
DR   N-PSDB; AAK94671.
XX
PT   830 Primers useful for synthesizing full length cDNA clones and their use
PT   in genetic manipulation.
XX
PS   Claim 8; SEQ ID NO 3671; 1380pp + Sequence Listing; English.
XX
CC   The invention relates to primers for synthesising full length cDNA
CC   clones. 830 cDNA molecules encoding a human protein have been isolated
CC   and nucleotide sequences of 5'- and 3'-ends of the cDNA molecules have
CC   been determined. Primers for synthesising the full length cDNA are useful
CC   for clarifying the function of the protein encoded by the cDNA. The full
CC   length clones were obtained by construction of full length enriched cDNA
CC   libraries that were synthesised by the oligo-capping method. The primers
CC   enable the production of the full length cDNA easily without any special
CC   methods. The present sequence is a polypeptide encoded by a full length
CC   human cDNA of the invention. Note: The sequence data for this patent did
CC   not form part of the printed specification, but was obtained in CD-ROM
CC   format directly from EPO
XX
SQ   Sequence 245 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 245;
  Best Local Similarity   50.0%;  Pred. No. 5.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        127 EQWAVIHI 134
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RESULT 139
AAB90730
ID   AAB90730 standard; protein; 245 AA.
XX
AC   AAB90730;
XX
DT   07-JUN-2001  (first entry)
XX
DE   Human CG300_3 protein sequence SEQ ID 159.
XX
KW   Human; secreted protein; nutrient; cytokine modulator; proliferation;
KW   differentiation; immune system modulator; tissue growth; chemotactic;
KW   haemostatic; thrombolytic; anti-inflammatory; tumour inhibition;
KW   haematopoiesis.
XX
OS   Homo sapiens.
XX
PN   WO200119988-A1.
XX
PD   22-MAR-2001.
XX
PF   14-SEP-2000; 2000WO-US025135.
XX
PR   17-SEP-1999;   99US-00398829.
XX
PA   (GEMY ) GENETICS INST INC.
XX
PI   Jacobs K,  Mccoy JM,  Lavallie ER,  Collins-Racie LA,  Evans C;
PI   Merberg D,  Treacy M,  Bowman MR,  Spaulding V,  Agostino MJ;
XX
DR   WPI; 2001-244801/25.
DR   N-PSDB; AAF98468.
XX
PT   Isolated nucleic acids encoding polypeptides, useful for modulating e.g.
PT   cytokine and cell proliferation/differentiation activity, the immune
PT   system and hematopoiesis regulating activity.
XX
PS   Disclosure; Page 485-486; 557pp; English.
XX
CC   Human cDNA clones represented in AAF98374 - AAF98489 encode secreted
CC   proteins AAB90667 - AAB90750. The cDNA clones are isolated from various
CC   tissue types, and may be used in the prevention, treatment and diagnosis
CC   of diseases associated with inappropriate protein expression. The
CC   polypeptides and nucleic acids may be used as nutrients or to modulate
CC   cytokine and cell proliferation/differentiation activity and may also be
CC   involved in modulation of the immune system. The cDNA sequences,
CC   proteins, their agonists and/or antagonists exhibit haematopoiesis
CC   regulating activity; tissue growth activity; activin/inhibin activity;
CC   chemotactic/chemokinetic activity; haemostatic and thrombolytic activity;
CC   receptor/ligand activity; anti-inflammatory activity; haematopoiesis
CC   activity; cadherin/tumour suppressor activity; and/or tumour inhibition
CC   activity. Included in the invention are probes represented in AAF98490 -
CC   AAF98572 which are specific for the cDNA clones encoding the secreted
CC   proteins
XX
SQ   Sequence 245 AA;

  Query Match            100.0%;  Score 25;  DB 4;  Length 245;
  Best Local Similarity   50.0%;  Pred. No. 5.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        127 EQWAVIHI 134


RESULT 140
ABU43385
ID   ABU43385 standard; protein; 246 AA.
XX
AC   ABU43385;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #28912.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Staphylococcus haemolyticus.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Wang L,  Zamudio C,  Malone C,  Haselbeck R,  Ohlsen KL,  Zyskind JW;
PI   Wall D,  Trawick JD,  Carr GJ,  Yamamoto R,  Forsyth RA,  Xu HH;
XX
DR   WPI; 2003-029926/02.
DR   N-PSDB; ACA47255.
XX
PT   New antisense nucleic acids, useful for identifying proteins or screening
PT   for homologous nucleic acids required for cellular proliferation to
PT   isolate candidate molecules for rational drug discovery programs.
XX
PS   Claim 25; SEQ ID NO 71309; 1766pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising any one of
CC   the 6213 antisense sequences given in the specification where expression
CC   of the nucleic acid inhibits proliferation of a cell. Also included are:
CC   (1) a vector comprising a promoter operably linked to the nucleic acid
CC   encoding a polypeptide whose expression is inhibited by the antisense
CC   nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC   polypeptide or its fragment whose expression is inhibited by the
CC   antisense nucleic acid; (4) an antibody capable of specifically binding
CC   the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC   proliferation or the activity of a gene in an operon required for
CC   proliferation; (7) identifying a compound that influences the activity of
CC   the gene product or that has an activity against a biological pathway
CC   required for proliferation, or that inhibits cellular proliferation; (8)
CC   identifying a gene required for cellular proliferation or the biological
CC   pathway in which a proliferation-required gene or its gene product lies
CC   or a gene on which the test compound that inhibits proliferation of an
CC   organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC   compound's activity; (11) a culture comprising strains in which the gene
CC   product is overexpressed or underexpressed; (12) determining the extent
CC   to which each of the strains is present in a culture or collection of
CC   strains; or (13) identifying the target of a compound that inhibits the
CC   proliferation of an organism. The antisense nucleic acids are useful for
CC   identifying proteins or screening for homologous nucleic acids required
CC   for cellular proliferation to isolate candidate molecules for rational
CC   drug discovery programs, or for screening homologous nucleic acids
CC   required for proliferation in cells other than S. aureus, S. typhimurium,
CC   K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC   the target prokaryotic essential genes. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 246 AA;

  Query Match            100.0%;  Score 25;  DB 6;  Length 246;
  Best Local Similarity   50.0%;  Pred. No. 5.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
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Db        152 SQGSVFHI 159


RESULT 141
ABM71246
ID   ABM71246 standard; protein; 247 AA.
XX
AC   ABM71246;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Staphylococcus aureus protein #486.
XX
KW   Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;
KW   enzymatic assay; antibiotic target.
XX
OS   Staphylococcus aureus.
XX
PN   WO200294868-A2.
XX
PD   28-NOV-2002.
XX
PF   27-MAR-2002; 2002WO-IB002637.
XX
PR   27-MAR-2001; 2001GB-00007661.
XX
PA   (CHIR-) CHIRON SPA.
XX
PI   Masignani V,  Mora M,  Scarselli M;
XX
DR   WPI; 2003-120786/11.
DR   N-PSDB; ACF72806.
XX
PT   New Staphylococcus aureus protein, useful as a vaccine for treating or
PT   preventing Staphylococcal infection, specifically an infection caused by
PT   S. aureus, e.g. sepsis.
XX
PS   Claim 1; SEQ ID NO 972; 49pp; English.
XX
CC   The invention relates to novel genes and encoded proteins from
CC   Staphylococcus aureus. A composition comprising the S. aureus protein, a
CC   nucleic acid encoding the protein, or an antibody to the protein, is
CC   useful as a pharmaceutical, particularly as a vaccine for treating or
CC   preventing infection due to Staphylococcus bacteria, specifically an
CC   infection caused by S. aureus. The composition is particularly useful for
CC   treating or preventing sepsis in a patient. The composition can also be
CC   used for diagnostics. The protein is also used in an assay for enzymatic
CC   studies and as a target for antibiotics. This sequence represents one of
CC   the novel S. aureus proteins of the invention
XX
SQ   Sequence 247 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 247;
  Best Local Similarity   50.0%;  Pred. No. 5.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        115 TQSIVSHI 122


RESULT 142
ABU19873
ID   ABU19873 standard; protein; 250 AA.
XX
AC   ABU19873;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #5400.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Borrelia cepacia.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Wang L,  Zamudio C,  Malone C,  Haselbeck R,  Ohlsen KL,  Zyskind JW;
PI   Wall D,  Trawick JD,  Carr GJ,  Yamamoto R,  Forsyth RA,  Xu HH;
XX
DR   WPI; 2003-029926/02.
DR   N-PSDB; ACA23743.
XX
PT   New antisense nucleic acids, useful for identifying proteins or screening
PT   for homologous nucleic acids required for cellular proliferation to
PT   isolate candidate molecules for rational drug discovery programs.
XX
PS   Claim 25; SEQ ID NO 47797; 1766pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising any one of
CC   the 6213 antisense sequences given in the specification where expression
CC   of the nucleic acid inhibits proliferation of a cell. Also included are:
CC   (1) a vector comprising a promoter operably linked to the nucleic acid
CC   encoding a polypeptide whose expression is inhibited by the antisense
CC   nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC   polypeptide or its fragment whose expression is inhibited by the
CC   antisense nucleic acid; (4) an antibody capable of specifically binding
CC   the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC   proliferation or the activity of a gene in an operon required for
CC   proliferation; (7) identifying a compound that influences the activity of
CC   the gene product or that has an activity against a biological pathway
CC   required for proliferation, or that inhibits cellular proliferation; (8)
CC   identifying a gene required for cellular proliferation or the biological
CC   pathway in which a proliferation-required gene or its gene product lies
CC   or a gene on which the test compound that inhibits proliferation of an
CC   organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC   compound's activity; (11) a culture comprising strains in which the gene
CC   product is overexpressed or underexpressed; (12) determining the extent
CC   to which each of the strains is present in a culture or collection of
CC   strains; or (13) identifying the target of a compound that inhibits the
CC   proliferation of an organism. The antisense nucleic acids are useful for
CC   identifying proteins or screening for homologous nucleic acids required
CC   for cellular proliferation to isolate candidate molecules for rational
CC   drug discovery programs, or for screening homologous nucleic acids
CC   required for proliferation in cells other than S. aureus, S. typhimurium,
CC   K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC   the target prokaryotic essential genes. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 250 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 250;
  Best Local Similarity   50.0%;  Pred. No. 5.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        101 HQAGVKHI 108


RESULT 143
ADC31828
```

ID ADC31828 standard; protein; 250 AA.
XX
AC ADC31828;
XX
DT 18-DEC-2003 (first entry)
XX
DE Human novel polypeptide sequence, SEQ ID NO:1910.
XX
KW Human; diagnostic; drug screening; forensics; gene mapping;
KW biodiversity assessment; Parkinson's disease; Alzheimer's disease;
KW neurodegenerative diseases; anaemia; platelet disorder; wound; burns;
KW ulcers; osteoporosis; autoimmune disease; cancer;
KW molecular weight marker; food supplement; antiparkinsonian; nootropic;
KW neuroprotective; antianaemic; anticoagulant; thrombolytic; vulnerary;
KW antiulcer; osteopathic; immunosuppressive; antiinflammatory; cytostatic;
KW gene therapy; chromosome 16.
XX
OS Homo sapiens.
XX
PN WO2003029271-A2.
XX
PD 10-APR-2003.
XX
PF 24-SEP-2002; 2002WO-US030474.
XX
PR 24-SEP-2001; 2001US-0324631P.
XX
PA (HYSE-) HYSEQ INC.
XX
PI Tang TY, Zhang J, Ren F, Xue AJ, Zhao QA, Wang J, Wehrman T;
PI Zhou P, Ghosh M, Wang D, Ma Y, Asundi V, Wang Z, Weng G;
PI Haley-Vicente D, Drmanac RT;
XX
DR WPI; 2003-371981/35.
DR N-PSDB; ADC30857.
XX
PT New polynucleotide and polypeptide useful for diagnosing, preventing or
PT treating conditions such as neurodegenerative diseases, anemias, platelet
PT disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or
PT cancer.
XX
PS Claim 20; SEQ ID NO 1910; 1185pp; English.
XX
CC The invention relates to 971 novel human cDNA sequences (ADC29919-
CC ADC30889)and the polypeptides they encode (ADC30890-ADC31860). The
CC invention also relates to nucleic acid sequences over 99% identical with
CC the novel human cDNAs. The invention additionally encompasses expression
CC vectors and host cells comprising a nucleic acid of the invention; the
CC recombinant production of a polypeptide of the invention; an antibody
CC against a polypeptide of the invention; a method of detecting
CC polynucleotides or polypeptides of the invention; and methods of
CC identifying a compound which binds to a polypeptide of the invention. The
CC invention further discloses methods of peventing, treating or
CC ameliorating a medical condition; kits comprising polynucleotide probes
CC and/or monoclonal antibodies for carrying out the methods of the
CC invention; methods for the identification of compounds that modulate the
CC expression or activity of the polynucleotide and/or polypeptide; and 767
CC contig sequences corresponding to the cDNA sequences of the invention
CC (ADC31861-ADC32627) and the polypeptides encoded by the contigs (ADC32628
CC -ADC33394). The nucleic acids and polypeptides of the invention are
CC useful in diagnostics, drug screening, forensics, gene mapping, in the
CC identification of mutations responsible for genetic disorders or other
CC traits, for assessing biodiversity, and in producing many other types of
CC data and products dependent on DNA and amino acid sequences. They are
CC also used for treating diseases such as Parkinson's disease, Alzheimer's
CC disease and other neurodegenerative diseases, anaemia, platelet
CC disorders, wounds, burns, ulcers, osteoporosis, autoimmune diseases or
CC cancer. The nucleic acids may also be used as hybridisation probes or
CC primers, and in the recombinant production of a protein. The polypeptides
CC are also useful in generating antibodies, as molecular weight markers,
CC and as food supplements. The present sequence represents a specifically
CC claimed human polypeptide sequence of the invention. Note: The sequence
CC data for this patent did not form part of the printed specification, but
CC was obtained in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences.
XX
SQ Sequence 250 AA;

```
  Query Match             100.0%;  Score 25;  DB 7;  Length 250;
  Best Local Similarity    50.0%;  Pred. No. 5.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        172 IQTYVEHI 179
```

RESULT 144
AAE20104
ID AAE20104 standard; protein; 251 AA.
XX
AC AAE20104;
XX
DT 29-AUG-2003 (revised)
DT 18-JUN-2002 (first entry)
XX
DE Lactobacillus rhamnosus triosephosphate isomerase tpi.
XX
KW Enzyme; flavour; aroma; texture; nutritional; dairy manufacture; therapy;
KW fermentation process; anti-infection; rotavirus infection; heart disease;
KW infantile diarrhoea; lactose digestion; anti-cancer; autoimmune disorder;
KW anti-mutagenesis; immune system modulation; allergy; Helicobacter pylori;
KW antihypertensive effect; urogenical infection; hepatic encephalopathy;
KW bowel syndrome; endocarditis; transgenic microbe; tpi; EC 5.3.1.1;
KW triosephosphate isomerase.
XX
OS Lactobacillus rhamnosus; HN001.
XX
PN WO200212506-A1.
XX
PD 14-FEB-2002.
XX
PF 08-AUG-2001; 2001WO-NZ000160.
XX
PR 08-AUG-2000; 2000US-00634238.
PR 28-NOV-2000; 2000US-00724623.
XX
PA (GENE-) GENESIS RES & DEV CORP LTD.
PA (VIAL-) VIALACTIA BIOSCIENCE NZ LTD.
XX
PI Glenn M, Havukkala IJ, Bloksberg LN, Lubbers MW, Dekker J;
PI Christensson AC, Holland R, O'toole PW, Reid JR, Coolbear T;
XX
DR WPI; 2002-241760/29.
DR N-PSDB; AAD31875, AAD31896.
XX
PT New polynucleotides and polypeptides from Lactobacillus rhamnosus, useful
PT in e.g. improving the flavor, aroma, texture and health-related benefits
PT of milk-derived products, or in increasing properties of microbes.
XX
PS Claim 11; Fig 40; 257pp; English.
XX
CC The present invention relates to a new isolated polynucleotide comprising
CC a sequence present in Lactobacillus rhamnosus strain HN001 and encoding a
CC polypeptide capable of modifying the flavour, aroma, texture, nutritional
CC and health benefits of milk-derived products, and/or survivability of
CC microbes in dairy manufacturing processes. The polynucleotides are useful
CC for improving the properties of microbes used in the manufacture of milk-
CC derived products such as cheeses, yogurt, fermented milk products, sour
CC milks and buttermilk; in modifying the flavour, aroma, texture and health
CC -related benefits of milk-derived products and in increasing the survival
CC of microbes during industrial fermentation processes. The bacteria may be
CC used to increase resistance to enteric pathogens and anti-infection
CC activity, including treatment of rotavirus infection and infantile
CC diarrhoea; aid in lactose digestion; as anti-cancer and anti-mutagenesis;
CC liver cancer reduction; reduction of small bowel bacterial overgrowth;

```
CC   immune system modulation and treatment of autoimmune disorders and
CC   allergies; treatment of allergic responses to foods; reduction of blood
CC   lipids and prevention of heart disease; antihypertensive effect;
CC   prevention and treatment of urogenical infections, Helicobacter pylori,
CC   or hepatic encephalopathy; treatment of inflammatory bowel disorder and
CC   irritable bowel syndrome; modulation of endocarditis; and for improved
CC   protein and carbohydrate utilization and conversion. The transgenic
CC   microbial population can be administered to a mammal as an anti-
CC   carcinogenic agent. The present sequence is Lactobacillus rhamnosus
CC   triosephosphate isomerase tpi. The EC number for triosephosphate
CC   isomerase is 5.3.1.1. (Updated on 29-AUG-2003 to standardise OS field)
XX
SQ   Sequence 251 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 251;
  Best Local Similarity   50.0%;  Pred. No. 5.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        183 AQEVVAHI 190


RESULT 145
AAW04738
ID   AAW04738 standard; protein; 253 AA.
XX
AC   AAW04738;
XX
DT   04-DEC-1996  (first entry)
XX
DE   Wasp venom 30 kDa insecticidal toxin.
XX
KW   Wasp; venom; insecticide; pesticide; neurotoxin; tobacco budworm;
KW   Heliothis virescens; biological control; insect; baculovirus.
XX
OS   Bracon hebetor.
XX
PN   WO9625429-A1.
XX
PD   22-AUG-1996.
XX
PF   16-FEB-1996;   96WO-US002181.
XX
PR   17-FEB-1995;   95US-00392546.
XX
PA   (NPSP-) NPS PHARM INC.
XX
PI   Johnson JH,  Kral RM,  Krapcho K;
XX
DR   WPI; 1996-393340/39.
DR   N-PSDB; AAT37331.
XX
PT   Insecticidal fractions of Bracon spp. wasp venom - have neurotoxic effect
PT   on tobacco budworm and are useful for controlling insect pests.
XX
PS   Claim 3; Page 45-46; 69pp; English.
XX
CC   A 16 kDa toxin (AAW04736), 30 kDa toxin (AAW04738), 18-1 toxin (AAW04739)
CC   and 18-2 toxin (AAW04740) were isolated from the venom gland of Bracon
CC   hebetor wasps by bioassay using tobacco budworm. They show neurotoxic
CC   effects on insect pests but have only a minimal toxicity to mammals. A
CC   cDNA clone (AAT37331) coding for the 30 kDa toxin precursor (AAW04737)
CC   can be used for prodn. of recombinant 30 kDa toxin by expression in
CC   prokaryotic or eukaryotic host cells. The wasp venom toxins are used as
CC   insecticidal agents. Expression from a baculovirus vector can be used for
CC   the biological control of insect pests
XX
SQ   Sequence 253 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 253;
  Best Local Similarity   50.0%;  Pred. No. 5.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         70 QQRKVEHI 77


RESULT 146
ABP79577
ID   ABP79577 standard; protein; 253 AA.
XX
AC   ABP79577;
XX
DT   07-MAR-2003  (first entry)
XX
DE   N. gonorrhoeae amino acid sequence SEQ ID 5684.
XX
KW   Antibacterial; infection; vaccine; gene therapy.
XX
OS   Neisseria gonorrhoeae.
XX
PN   WO200279243-A2.
XX
PD   10-OCT-2002.
XX
PF   12-FEB-2002; 2002WO-IB002069.
XX
PR   12-FEB-2001; 2001GB-00003424.
XX
PA   (CHIR-) CHIRON SPA.
XX
PI   Fontana MR,  Pizza M,  Masignani V,  Monaci E;
XX
DR   WPI; 2003-058415/05.
DR   N-PSDB; ABZ40547.
XX
PT   New protein from Neisseria gonorrheae, useful for the manufacture of a
PT   medicament for treating or preventing N. gonorrheae infection.
XX
PS   Disclosure; Page 603; 815pp; English.
XX
CC   The present invention relates to proteins from Neisseria gonorrhoeae.
CC   Also disclosed are the nucleic acid molecules encoding the proteins and
CC   antibodies that specifically bind to the proteins. The composition
CC   comprising the protein, nucleic acid or antibody is useful for the
CC   manufacture of a medicament for treating or preventing N. gonorrhoeae
CC   infection, this may be in the form of a vaccine or gene therapy.
CC   Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC   molecules of the invention
XX
SQ   Sequence 253 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 253;
  Best Local Similarity   50.0%;  Pred. No. 5.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        242 AQAAVEHI 249


RESULT 147
ADA35127
ID   ADA35127 standard; protein; 255 AA.
XX
AC   ADA35127;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Acinetobacter baumannii protein #2288.
XX
KW   Acinetobacter baumannii; bacterial disease; antibacterial; vaccine;
KW   plant biocontrol agent.
XX
```

OS Acinetobacter baumannii.
XX
PN US6562958-B1.
XX
PD 13-MAY-2003.
XX
PF 04-JUN-1999; 99US-00328352.
XX
PR 09-JUN-1998; 98US-0088701P.
XX
PA (GENO-) GENOME THERAPEUTICS CORP.
XX
PI Breton G, Bush D;
XX
DR WPI; 2003-576092/54.
DR N-PSDB; ADA31001.
XX
PT New Acinetobacter baumanii proteins and nucleic acids, useful as reagents
PT for diagnosing a bacterial disease, as components of antibacterial
PT vaccines, as targets for antibacterial drugs, or as biocontrol agents for
PT plants.
XX
PS Example; SEQ ID NO 6414; 328pp; English.
XX
CC The invention relates to isolated Acinetobacter baumannii nucleic acids.
CC The A. baumannii nucleic acids and polypeptides are useful as reagents
CC for diagnosing a bacterial disease, as components of antibacterial
CC vaccines, as targets for antibacterial drugs, to detect the presence of
CC A. baumannii and other Acinetobacter species in a sample, in screening
CC compounds for the ability to interfere with the A. baumannii life cycle
CC or to inhibit A. baumannii infection, and as biocontrol agents for
CC plants. The present sequence represents the amino acid sequence of an A.
CC baumannii protein.
XX
SQ Sequence 255 AA;

Query Match 100.0%; Score 25; DB 6; Length 255;
Best Local Similarity 50.0%; Pred. No. 5.6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

```
Qy          1 XQXXVXHI 8
              :|::|:||
Db         53 AQATVEHI 60
```

RESULT 148
AAG13274
ID AAG13274 standard; protein; 261 AA.
XX
AC AAG13274;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 12710.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
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PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
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PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
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PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
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PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
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PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
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PR 19-JUL-1999; 99US-0144325P.

PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 19-JUL-1999; 99US-0144335P.
PR 20-JUL-1999; 99US-0144352P.
PR 20-JUL-1999; 99US-0144632P.
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PR 21-JUL-1999; 99US-0144814P.
PR 21-JUL-1999; 99US-0145086P.
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PR 22-JUL-1999; 99US-0145085P.
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PR 23-JUL-1999; 99US-0145224P.
PR 26-JUL-1999; 99US-0145276P.
PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 27-JUL-1999; 99US-0145919P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
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PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
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PR 06-AUG-1999; 99US-0147416P.
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PR 18-AUG-1999; 99US-0149426P.
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PR 20-AUG-1999; 99US-0149723P.
PR 20-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156458P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
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PR 06-OCT-1999; 99US-0157865P.
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PR 21-OCT-1999; 99US-0160770P.
PR 21-OCT-1999; 99US-0160814P.
PR 21-OCT-1999; 99US-0160815P.
PR 22-OCT-1999; 99US-0160980P.
PR 22-OCT-1999; 99US-0160981P.
PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 261;
Best Local Similarity 50.0%; Pred. No. 5.8e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 45 SQRKVNHI 52

RESULT 149
ABP77401
ID ABP77401 standard; protein; 264 AA.
XX
AC ABP77401;
XX
DT 07-MAR-2003 (first entry)
XX
DE N. gonorrhoeae amino acid sequence SEQ ID 1332.
XX
KW Antibacterial; infection; vaccine; gene therapy.
XX
OS Neisseria gonorrhoeae.
XX
PN WO200279243-A2.
XX
PD 10-OCT-2002.
XX
PF 12-FEB-2002; 2002WO-IB002069.
XX
PR 12-FEB-2001; 2001GB-00003424.
XX
PA (CHIR-) CHIRON SPA.
XX
PI Fontana MR, Pizza M, Masignani V, Monaci E;
XX
DR WPI; 2003-058415/05.
DR N-PSDB; ABZ38371.
XX
PT New protein from Neisseria gonorrheae, useful for the manufacture of a
PT medicament for treating or preventing N. gonorrheae infection.
XX
PS Disclosure; Page 285; 815pp; English.
XX
CC The present invention relates to proteins from Neisseria gonorrhoeae.

```
CC   Also disclosed are the nucleic acid molecules encoding the proteins and
CC   antibodies that specifically bind to the proteins. The composition
CC   comprising the protein, nucleic acid or antibody is useful for the
CC   manufacture of a medicament for treating or preventing N. gonorrhoeae
CC   infection, this may be in the form of a vaccine or gene therapy.
CC   Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC   molecules of the invention
XX
SQ   Sequence 264 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 264;
  Best Local Similarity   50.0%;  Pred. No. 5.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db          5 LQKVVRHI 12


RESULT 150
AAG29599
ID   AAG29599 standard; protein; 267 AA.
XX
AC   AAG29599;
XX
DT   17-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 35245.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
XX
PF   25-FEB-2000; 2000EP-00301439.
XX
PR   25-FEB-1999;   99US-0121825P.
PR   05-MAR-1999;   99US-0123180P.
PR   09-MAR-1999;   99US-0123548P.
PR   23-MAR-1999;   99US-0125788P.
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PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 267;
Best Local Similarity 50.0%; Pred. No. 5.9e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 70 PQECVSHI 77

RESULT 151
ABB54124
ID ABB54124 standard; protein; 269 AA.
XX
AC ABB54124;
XX
DT 29-AUG-2003 (revised)
DT 16-MAY-2002 (first entry)
XX
DE Lactococcus lactis protein yicB.
XX
KW Biosynthesis; biodegradation; lactic bacterium; yogurt; cheese.
XX
OS Lactococcus lactis; IL1403.
XX
PN FR2807446-A1.
XX
PD 12-OCT-2001.
XX
PF 11-APR-2000; 2000FR-00004630.
XX
PR 11-APR-2000; 2000FR-00004630.
XX
PA (INRG) INRA INST NAT RECH AGRONOMIQUE.
XX
PI Bolotine A, Sorokine A, Renault P, Ehrlich SD;
XX
DR WPI; 2002-043418/06.
XX
PT New nucleotide sequence useful in the identification or Lactococcus
PT lactis and related species.
XX
PS Claim 6; SEQ ID NO 826; 2504pp; French.
XX
CC The present invention is related to a Lactococcus lactis nucleotide
CC sequence (ABA90521) and related proteins (ABB53300-ABB55621). The nucleic
CC acid sequence is useful in the detection and/or amplification of nucleic
CC acid sequence, particularly to identify Lactococcus lactis or related
CC species. The proteins of the invention are useful for the biosynthesis or
CC biodegradation of a composition of interest. The invention helps research
CC in lactic bacteria, particularly useful in the production of yogurt and
CC cheese. Note: The sequence data for this patent is based on equivalent
CC patent WO200177334 (published 18-OCT-2001) which is available in
CC electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences. (Updated on 29-AUG-2003 to
CC standardise OS field)
XX
SQ Sequence 269 AA;

Query Match 100.0%; Score 25; DB 5; Length 269;
Best Local Similarity 50.0%; Pred. No. 6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 256 DQHAVAHI 263

RESULT 152
ABU25900
ID ABU25900 standard; protein; 269 AA.

XX
AC ABU25900;
XX
DT 19-JUN-2003 (first entry)
XX
DE Protein encoded by Prokaryotic essential gene #11427.
XX
KW Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS Corynebacterium diphtheriae.
XX
PN WO200277183-A2.
XX
PD 03-OCT-2002.
XX
PF 21-MAR-2002; 2002WO-US009107.
XX
PR 21-MAR-2001; 2001US-00815242.
PR 06-SEP-2001; 2001US-00948993.
PR 25-OCT-2001; 2001US-0342923P.
PR 08-FEB-2002; 2002US-00072851.
PR 06-MAR-2002; 2002US-0362699P.
XX
PA (ELIT-) ELITRA PHARM INC.
XX
PI Wang L, Zamudio C, Malone C, Haselbeck R, Ohlsen KL, Zyskind JW;
PI Wall D, Trawick JD, Carr GJ, Yamamoto R, Forsyth RA, Xu HH;
XX
DR WPI; 2003-029926/02.
DR N-PSDB; ACA29770.
XX
PT New antisense nucleic acids, useful for identifying proteins or screening
PT for homologous nucleic acids required for cellular proliferation to
PT isolate candidate molecules for rational drug discovery programs.
XX
PS Claim 25; SEQ ID NO 53824; 1766pp; English.
XX
CC The invention relates to an isolated nucleic acid comprising any one of
CC the 6213 antisense sequences given in the specification where expression
CC of the nucleic acid inhibits proliferation of a cell. Also included are:
CC (1) a vector comprising a promoter operably linked to the nucleic acid
CC encoding a polypeptide whose expression is inhibited by the antisense
CC nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC polypeptide or its fragment whose expression is inhibited by the
CC antisense nucleic acid; (4) an antibody capable of specifically binding
CC the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC proliferation or the activity of a gene in an operon required for
CC proliferation; (7) identifying a compound that influences the activity of
CC the gene product or that has an activity against a biological pathway
CC required for proliferation, or that inhibits cellular proliferation; (8)
CC identifying a gene required for cellular proliferation or the biological
CC pathway in which a proliferation-required gene or its gene product lies
CC or a gene on which the test compound that inhibits proliferation of an
CC organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC compound's activity; (11) a culture comprising strains in which the gene
CC product is overexpressed or underexpressed; (12) determining the extent
CC to which each of the strains is present in a culture or collection of
CC strains; or (13) identifying the target of a compound that inhibits the
CC proliferation of an organism. The antisense nucleic acids are useful for
CC identifying proteins or screening for homologous nucleic acids required
CC for cellular proliferation to isolate candidate molecules for rational
CC drug discovery programs, or for screening homologous nucleic acids
CC required for proliferation in cells other than S. aureus, S. typhimurium,
CC K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC the target prokaryotic essential genes. Note: The sequence data for this
CC patent did not form part of the printed specification, but was obtained
CC in electronic format directly from WIPO at
CC ftp.wipo.int/pub/published_pct_sequences
XX
SQ Sequence 269 AA;

Query Match 100.0%; Score 25; DB 6; Length 269;
Best Local Similarity 50.0%; Pred. No. 6e+03;

Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
:|::|:||
Db 85 YQGTVSHI 92

RESULT 153
AAG29598
ID AAG29598 standard; protein; 271 AA.
XX
AC AAG29598;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 35244.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
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PR 06-APR-1999; 99US-0128234P.
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PR 19-APR-1999; 99US-0130077P.
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PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
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PR 20-JUL-1999; 99US-0144352P.
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PR 21-JUL-1999; 99US-0145088P.
PR 22-JUL-1999; 99US-0145085P.
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PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148684P.
PR 16-AUG-1999; 99US-0149368P.
PR 17-AUG-1999; 99US-0149175P.
PR 18-AUG-1999; 99US-0149426P.
PR 20-AUG-1999; 99US-0149722P.
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PR 20-AUG-1999; 99US-0149929P.
PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
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PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
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PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156450P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
PR 13-OCT-1999; 99US-0159294P.
PR 13-OCT-1999; 99US-0159295P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.
PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
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PR 22-OCT-1999; 99US-0160989P.
PR 25-OCT-1999; 99US-0161404P.
PR 25-OCT-1999; 99US-0161405P.
PR 25-OCT-1999; 99US-0161406P.
PR 26-OCT-1999; 99US-0161359P.
PR 26-OCT-1999; 99US-0161360P.
PR 26-OCT-1999; 99US-0161361P.
PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 271;
Best Local Similarity 50.0%; Pred. No. 6e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Db 74 PQECVSHI 81

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RESULT 154
ABB90834
ID   ABB90834 standard; protein; 271 AA.
XX
AC   ABB90834;
XX
DT   31-MAY-2002  (first entry)
XX
DE   Herbicidally active polypeptide SEQ ID NO 45.
XX
KW   Herbicidal; plant; agriculture; herbicide.
XX
OS   Arabidopsis thaliana.
XX
PN   WO200210210-A2.
XX
PD   07-FEB-2002.
XX
PF   28-AUG-2001; 2001WO-EP009892.
XX
PR   28-AUG-2001; 2001WO-EP009892.
XX
PA   (FARB ) BAYER AG.
XX
PI   Tietjen K,  Weidler M;
XX
DR   WPI; 2002-269010/31.
XX
PT   Identifying plant target proteins for herbicidally active compounds,
PT   comprising aligning and comparing nucleic acid or amino acid sequences
PT   from plant with nucleic acid or amino acid sequences from non-plant
PT   organisms.
XX
PS   Claim 5; SEQ ID NO 45; 261pp + Sequence Listing; English.
XX
CC   The invention relates to identifying target proteins (ABB90790-ABB94016)
CC   for herbicidally active compounds, comprising aligning and comparing
CC   nucleic acid or amino acid sequences from plant with nucleic acid or
CC   amino acid sequences from non-plant organisms using suitable search
CC   parameters, where plant sequences having an E-value greater by a factor
CC   of 3 than the E-value of most similar non-plant sequences are selected.
CC   The polypeptides or nucleic acids encoding them are useful for
CC   identifying modulators. The identified modulators are useful as
CC   herbicides
XX
SQ   Sequence 271 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 271;
  Best Local Similarity   50.0%;  Pred. No. 6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         74 PQECVSHI 81


RESULT 155
AAR99571
ID   AAR99571 standard; protein; 275 AA.
XX
AC   AAR99571;
XX
DT   30-SEP-1996  (first entry)
XX
DE   Wasp venom BrhTX-1 subunit (d).
XX
KW   Wasp; venom; neurotoxin; insecticide; biological control agent;
KW   Lepidoptera; insect.
XX
OS   Bracon hebetor.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .22
FT                   /label= Sig_peptide
FT   Protein         23. .275
FT                   /label= Mat_protein
XX
PN   WO9616171-A1.
XX
PD   30-MAY-1996.
XX
PF   21-NOV-1995;   95WO-GB002720.
XX
PR   22-NOV-1994;   94GB-00023540.
PR   19-JAN-1995;   95GB-00001074.
PR   29-JUN-1995;   95GB-00013293.
XX
PA   (ZENE ) ZENECA LTD.
PA   (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX
PI   Windass JD,  Duncan RE,  Baule VJ,  Christian PD;
XX
DR   WPI; 1996-268607/27.
DR   N-PSDB; AAT32432.
XX
PT   Bracon hebetor toxins and DNA encoding them - useful in biological
PT   control agents to combat insect pests.
XX
PS   Claim 14; Page 47; 83pp; English.
XX
CC   The amino acid sequence (AAR99571) of subunit (d) of the BrhTX-1
CC   neurotoxin of the wasp Bracon hebetor was deduced from a cDNA clone
CC   (AAT32432) isolated from a cDNA library of the female wasp. Bracon
CC   hebetor is a parasite of lepidopteran larvae and produces a paralysing
CC   venom. Recombinant subunit (d) of BrhTX-1 can be produced in transformed
CC   host cells, partic. fungi, and is useful in the control of insect pests.
CC   Bacterial, viral or fungal biological control agents or transgenic plants
CC   expressing the subunit are also useful for combating insect pests
XX
SQ   Sequence 275 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 275;
  Best Local Similarity   50.0%;  Pred. No. 6.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         92 QQRKVEHI 99


RESULT 156
AAW04737
ID   AAW04737 standard; protein; 275 AA.
XX
AC   AAW04737;
XX
DT   04-DEC-1996  (first entry)
XX
DE   Wasp venom 30 kDa insecticidal toxin precursor.
XX
KW   Wasp; venom; insecticide; pesticide; neurotoxin; tobacco budworm;
KW   Heliothis virescens; biological control; insect.
XX
OS   Bracon hebetor.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .22
FT                   /label= Sig_peptide
FT   Protein         23. .275
FT                   /label= Mat_protein
FT                   /note= "30 kDa toxin"
XX
PN   WO9625429-A1.
XX
PD   22-AUG-1996.
XX
```

```
PF   16-FEB-1996;   96WO-US002181.
XX
PR   17-FEB-1995;   95US-00392546.
XX
PA   (NPSP-) NPS PHARM INC.
XX
PI   Johnson JH,  Kral RM,  Krapcho K;
XX
DR   WPI; 1996-393340/39.
DR   N-PSDB; AAT37331.
XX
PT   Insecticidal fractions of Bracon spp. wasp venom - have neurotoxic effect
PT   on tobacco budworm and are useful for controlling insect pests.
XX
PS   Example 13; Page 50-51; 69pp; English.
XX
CC   The precursor (AAW04737) of the 30 kDa insecticidal toxin (AAW04738) of
CC   Bracon hebetor wasps is the product of a cDNA clone (AAT37331) isolated
CC   from wasp venom gland cDNA. It is processed to form the mature 30 kDa
CC   toxin which has a neurotoxic effect on tobacco budworm and which is
CC   useful for controlling insect pests
XX
SQ   Sequence 275 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 275;
  Best Local Similarity   50.0%;  Pred. No. 6.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         92 QQRKVEHI 99


RESULT 157
AAW52127
ID   AAW52127 standard; protein; 275 AA.
XX
AC   AAW52127;
XX
DT   18-JUN-1998  (first entry)
XX
DE   Insecticidal toxin subunit BrhTX-1d.
XX
KW   Insecticidal toxin; Bracon hebetor; insect control; pathogen;
KW   recombinant baculovirus.
XX
OS   Bracon hebetor.
XX
FH   Key             Location/Qualifiers
FT   Peptide         1. .21
FT                   /note= "putative leader sequence"
FT   Protein         22. .275
FT                   /note= "mature toxin subunit BrhTX-1d"
XX
PN   WO9744355-A1.
XX
PD   27-NOV-1997.
XX
PF   01-MAY-1997;   97WO-GB001205.
XX
PR   22-MAY-1996;   96GB-00010687.
PR   22-MAY-1996;   96GB-00010695.
PR   22-MAY-1996;   96GB-00010697.
PR   22-MAY-1996;   96GB-00010738.
PR   22-MAY-1996;   96GB-00010739.
PR   22-MAY-1996;   96GB-00010748.
XX
PA   (ZENE ) ZENECA LTD.
PA   (CSIR ) COMMONWEALTH SCI & IND RES ORG.
XX
PI   Duncan RE,  Suner M,  Daly A,  Christian PD,  Windass JD;
PI   Claudianos A;
XX
DR   WPI; 1998-018430/02.
DR   N-PSDB; AAV17148.
XX
PT   New nucleic acid encoding a combination of insecticidal sub:unit(s) of
PT   wasp toxin - and related transformed cells, insect pathogens and
PT   combinations of proteins, useful as insecticides.
XX
PS   Claim 1; Page 47-48; 84pp; English.
XX
CC   This is an insecticidal toxin subunit BrhTX-1d. The specification
CC   provides a 1811 base pair spliced RNA (AAV17183) derived from a Bracon
CC   hebetor genomic clone that encodes at least two of the insecticidal toxin
CC   subunits shown in sequences AAW52124-W52128. The spliced RNA can
CC   hybridise with extension products prepared from a BrhTX-1a encoding 564
CC   base pair (AAV17145) template with 6 specified primers. A nucleic acid
CC   encoding at least one of the specified subunits can be modified so that
CC   mRNA instability motifs and/or fortuitous splice sites are removed, or
CC   insect-pest preference codons are used, so that expression of this
CC   nucleic acid in insect cells yields practically the same protein as
CC   unmodified nucleic acid in its endogenous organism. The nucleic acid
CC   encoding an insecticidal toxin subunit can be complementary to a sequence
CC   that hybridises under specified conditions to any of sequences shown in
CC   AAV17145 to AAV17149. Cells transformed with these nucleic acids,
CC   organisms regenerated from these cells and pathogens containing these
CC   nucleic acids and insecticidal compositions comprising a combinations of
CC   the toxin subunits are all used for control of insects. The nucleic acids
CC   are used to produce recombinant baculoviruses for insect control
XX
SQ   Sequence 275 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 275;
  Best Local Similarity   50.0%;  Pred. No. 6.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         92 QQRKVEHI 99


RESULT 158
AAG13273
ID   AAG13273 standard; protein; 275 AA.
XX
AC   AAG13273;
XX
DT   17-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 12709.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
XX
PF   25-FEB-2000; 2000EP-00301439.
XX
PR   25-FEB-1999;   99US-0121825P.
PR   05-MAR-1999;   99US-0123180P.
PR   09-MAR-1999;   99US-0123548P.
PR   23-MAR-1999;   99US-0125788P.
PR   25-MAR-1999;   99US-0126264P.
PR   29-MAR-1999;   99US-0126785P.
PR   01-APR-1999;   99US-0127462P.
PR   06-APR-1999;   99US-0128234P.
PR   08-APR-1999;   99US-0128714P.
PR   16-APR-1999;   99US-0129845P.
PR   19-APR-1999;   99US-0130077P.
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PR 23-APR-1999; 99US-0130510P.
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PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
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PR 13-OCT-1999; 99US-0159295P.
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PR   26-OCT-1999;   99US-0161361P.
PR   28-OCT-1999;   99US-0161920P.
PR   28-OCT-1999;   99US-0161992P.
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PR   29-OCT-1999;   99US-0162142P.

  Query Match             100.0%;  Score 25;  DB 3;  Length 275;
  Best Local Similarity   50.0%;  Pred. No. 6.1e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         59 SQRKVNHI 66


RESULT 159
ADE63384
ID   ADE63384 standard; protein; 280 AA.
XX
AC   ADE63384;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Rat Protein P10247, SEQ ID NO 9323.
XX
KW   Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KW   chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS   Rattus norvegicus.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P10247.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a rat protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 280 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 6.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        197 CQEEVSHI 204


RESULT 160
ADE63392
ID   ADE63392 standard; protein; 280 AA.
XX
AC   ADE63392;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Rat Protein P10247, SEQ ID NO 9331.
XX
KW   Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KW   chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS   Rattus norvegicus.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P10247.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
```

```
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
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CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 280 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 6.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        197 CQEEVSHI 204


RESULT 161
ADE63388
ID   ADE63388 standard; protein; 280 AA.
XX
AC   ADE63388;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Rat Protein P10247, SEQ ID NO 9327.
XX
KW   Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KW   chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS   Rattus norvegicus.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P10247.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
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XX
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CC   or human polynucleotides or a polynucleotide which represents a fragment,
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CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a rat protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
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CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 280 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 6.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        197 CQEEVSHI 204


RESULT 162
ADE63458
ID   ADE63458 standard; protein; 280 AA.
XX
AC   ADE63458;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Rat Protein CAA32468, SEQ ID NO 9397.
XX
KW   Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KW   chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS   Rattus norvegicus.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
```

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XX
DR   WPI; 2003-268312/26.
DR   GENBANK; CAA32468.
XX
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PT   preparing a medicament for treating pain in an animal.
XX
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XX
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CC   or human polynucleotides or a polynucleotide which represents a fragment,
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CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
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CC   the specification) which is differentially expressed during pain. Note:
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CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 280 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 6.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        197 CQEEVSHI 204


RESULT 163
ADE63396
ID   ADE63396 standard; protein; 280 AA.
XX
AC   ADE63396;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Rat Protein P10247, SEQ ID NO 9335.
XX
KW   Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KW   chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS   Rattus norvegicus.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P10247.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
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CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
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CC   The sequence data for this patent did not form part of the printed
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CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 280 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 6.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        197 CQEEVSHI 204


RESULT 164
ADE63462
ID   ADE63462 standard; protein; 280 AA.
XX
AC   ADE63462;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Rat Protein CAA32468, SEQ ID NO 9401.
XX
KW   Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KW   chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS   Rattus norvegicus.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
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PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; CAA32468.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
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CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
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CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
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CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 280 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 6.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        197 CQEEVSHI 204


RESULT 165
ADD46359
ID   ADD46359 standard; protein; 280 AA.
XX
AC   ADD46359;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Rat Protein P10247, SEQ ID NO 12037.
XX
KW   Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;
KW   chronic constriction injury; CCI; spared nerve injury; SNI; Chung.
XX
OS   Rattus norvegicus.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P10247.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
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CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
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CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 280 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 280;
  Best Local Similarity   50.0%;  Pred. No. 6.2e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        197 CQEEVSHI 204


RESULT 166
AAG13272
ID   AAG13272 standard; protein; 281 AA.
XX
AC   AAG13272;
XX
DT   17-OCT-2000  (first entry)
XX
DE   Arabidopsis thaliana protein fragment SEQ ID NO: 12708.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
```

XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
XX
PR 25-FEB-1999; 99US-0121825P.
PR 05-MAR-1999; 99US-0123180P.
PR 09-MAR-1999; 99US-0123548P.
PR 23-MAR-1999; 99US-0125788P.
PR 25-MAR-1999; 99US-0126264P.
PR 29-MAR-1999; 99US-0126785P.
PR 01-APR-1999; 99US-0127462P.
PR 06-APR-1999; 99US-0128234P.
PR 08-APR-1999; 99US-0128714P.
PR 16-APR-1999; 99US-0129845P.
PR 19-APR-1999; 99US-0130077P.
PR 21-APR-1999; 99US-0130449P.
PR 23-APR-1999; 99US-0130510P.
PR 23-APR-1999; 99US-0130891P.
PR 28-APR-1999; 99US-0131449P.
PR 30-APR-1999; 99US-0132048P.
PR 30-APR-1999; 99US-0132407P.
PR 04-MAY-1999; 99US-0132484P.
PR 05-MAY-1999; 99US-0132485P.
PR 06-MAY-1999; 99US-0132486P.
PR 06-MAY-1999; 99US-0132487P.
PR 07-MAY-1999; 99US-0132863P.
PR 11-MAY-1999; 99US-0134256P.
PR 14-MAY-1999; 99US-0134218P.
PR 14-MAY-1999; 99US-0134219P.
PR 14-MAY-1999; 99US-0134221P.
PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
PR 25-MAY-1999; 99US-0136021P.
PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
PR 09-JUL-1999; 99US-0142920P.
PR 12-JUL-1999; 99US-0142977P.
PR 13-JUL-1999; 99US-0143542P.
PR 14-JUL-1999; 99US-0143624P.
PR 15-JUL-1999; 99US-0144005P.
PR 16-JUL-1999; 99US-0144085P.
PR 16-JUL-1999; 99US-0144086P.
PR 19-JUL-1999; 99US-0144325P.
PR 19-JUL-1999; 99US-0144331P.
PR 19-JUL-1999; 99US-0144332P.
PR 19-JUL-1999; 99US-0144333P.
PR 19-JUL-1999; 99US-0144334P.
PR 19-JUL-1999; 99US-0144335P.
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Query Match 100.0%; Score 25; DB 3; Length 281;
Best Local Similarity 50.0%; Pred. No. 6.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Qy          1 XQXXVXHI 8
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Db         65 SQRKVNHI 72
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RESULT 167
AAG53052
ID AAG53052 standard; protein; 281 AA.
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AC AAG53052;
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DT 18-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 67507.
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KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
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XX
PD 06-SEP-2000.
XX
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Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

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Db 65 SQRKVNHI 72

RESULT 168
ABM71661
ID ABM71661 standard; protein; 281 AA.
XX
AC ABM71661;
XX
DT 20-NOV-2003 (first entry)
XX
DE Staphylococcus aureus protein #901.
XX
KW Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;
KW enzymatic assay; antibiotic target.
XX
OS Staphylococcus aureus.
XX
PN WO200294868-A2.
XX
PD 28-NOV-2002.
XX
PF 27-MAR-2002; 2002WO-IB002637.
XX
PR 27-MAR-2001; 2001GB-00007661.
XX
PA (CHIR-) CHIRON SPA.
XX
PI Masignani V, Mora M, Scarselli M;
XX

DR WPI; 2003-120786/11.
DR N-PSDB; ACF73221.
XX
PT New Staphylococcus aureus protein, useful as a vaccine for treating or
PT preventing Staphylococcal infection, specifically an infection caused by
PT S. aureus, e.g. sepsis.
XX
PS Claim 1; SEQ ID NO 1802; 49pp; English.
XX
CC The invention relates to novel genes and encoded proteins from
CC Staphylococcus aureus. A composition comprising the S. aureus protein, a
CC nucleic acid encoding the protein, or an antibody to the protein, is
CC useful as a pharmaceutical, particularly as a vaccine for treating or
CC preventing infection due to Staphylococcus bacteria, specifically an
CC infection caused by S. aureus. The composition is particularly useful for
CC treating or preventing sepsis in a patient. The composition can also be
CC used for diagnostics. The protein is also used in an assay for enzymatic
CC studies and as a target for antibiotics. This sequence represents one of
CC the novel S. aureus proteins of the invention
XX
SQ Sequence 281 AA;

Query Match 100.0%; Score 25; DB 6; Length 281;
Best Local Similarity 50.0%; Pred. No. 6.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
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Db 94 KQSGVAHI 101

RESULT 169
ABG30846
ID ABG30846 standard; protein; 283 AA.
XX
AC ABG30846;
XX
DT 21-OCT-2002 (first entry)
XX
DE Human tyrosine phosphatase protein #2.
XX
KW Human; tyrosine phosphatase; obesity; diabetes; Parkinson's disease;
KW central nervous system disorder; CNS; cardiovascular disorder; stroke;
KW chronic obstructive pulmonary disease; cancer; multiple sclerosis;
KW Alzheimer's disease; Huntington's disease; congestive heart failure;
KW myocardial infarction.
XX
OS Homo sapiens.
XX
PN WO200242435-A2.
XX
PD 30-MAY-2002.
XX
PF 27-NOV-2001; 2001WO-EP013794.
XX
PR 27-NOV-2000; 2000US-0252912P.
XX
PA (FARB) BAYER AG.
XX
PI Zhu Z;
XX
DR WPI; 2002-575236/61.
DR N-PSDB; ABK89180.
XX
PT New human tyrosine phosphatase polypeptide, the regulation of which is
PT useful for treating obesity, diabetes, cardiovascular or central nervous
PT system disorder, chronic obstructive pulmonary disease and cancer.
XX
PS Claim 25; Fig 8; 145pp; English.
XX
CC The present invention relates to a new human tyrosine phosphatase
CC polypeptide. The invention is useful for the preparation of a medicament
CC for modulating the activity of human tyrosine phosphatase in a disease
CC such as obesity, diabetes, a central nervous system (CNS) disorder,
CC chronic obstructive pulmonary disease, cardiovascular disorder or cancer.
CC The invention is useful for treating a human tyrosine phosphatase
CC dysfunction related disease, preferably the above mentioned diseases. The
CC invention is useful for treating the above mentioned disorders, where the
CC CNS disorder is selected from Parkinson's disease, multiple sclerosis,
CC stroke, Alzheimer's disease, and Huntington's disease, and the
CC cardiovascular disorder is selected from congestive heart failure and
CC myocardial infarction. The molecules of the invention are useful in
CC diagnostic assays for detecting diseases and abnormalities or
CC susceptibility to disease and abnormalities related to the presence of
CC mutations in the polynucleotide coding the polypeptide of the invention.
CC The present amino acid sequence represents the human tyrosine phosphatase
CC protein #2 of the invention
XX
SQ Sequence 283 AA;

Query Match 100.0%; Score 25; DB 5; Length 283;
Best Local Similarity 50.0%; Pred. No. 6.3e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
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Db 70 FQGRVSHI 77

RESULT 170
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ID AAG11106 standard; protein; 284 AA.
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AC AAG11106;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 9697.
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KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
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PD 06-SEP-2000.
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PF 25-FEB-2000; 2000EP-00301439.
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PR 25-FEB-1999; 99US-0121825P.
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Query Match 100.0%; Score 25; DB 3; Length 284;
Best Local Similarity 50.0%; Pred. No. 6.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
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Db 106 EQTPVKHI 113

RESULT 171
AAG29597
ID AAG29597 standard; protein; 285 AA.
XX
AC AAG29597;
XX
DT 17-OCT-2000 (first entry)
XX
DE Arabidopsis thaliana protein fragment SEQ ID NO: 35243.
XX
KW Protein identification; signal transduction pathway; metabolic pathway;
KW hybridisation assay; genetic mapping; gene expression control; promoter;
KW termination sequence.
XX
OS Arabidopsis thaliana.
XX
PN EP1033405-A2.
XX
PD 06-SEP-2000.
XX
PF 25-FEB-2000; 2000EP-00301439.
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PR 18-AUG-1999; 99US-0149426P.
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PR 28-OCT-1999; 99US-0161920P.
PR 28-OCT-1999; 99US-0161992P.
PR 28-OCT-1999; 99US-0161993P.
PR 29-OCT-1999; 99US-0162142P.

Query Match 100.0%; Score 25; DB 3; Length 285;
Best Local Similarity 50.0%; Pred. No. 6.4e+03;
Matches 4; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 XQXXVXHI 8
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Db 88 PQECVSHI 95

RESULT 172
ABM68471
ID ABM68471 standard; protein; 285 AA.
XX
AC ABM68471;
XX
DT 20-NOV-2003 (first entry)
XX
DE Photorhabdus luminescens protein sequence #1568.
XX
KW Antibacterial; fungicide; insecticide; polymorphism; genetic analysis;
KW detection; food; gene expression; plant; animal; microorganism; toxin;
KW antibiotic; biopesticide; virulence factor; disease model; plague;
KW whooping cough.
XX
OS Photorhabdus luminescens.
XX
PN WO200294867-A2.
XX
PD 28-NOV-2002.
XX
PF 07-FEB-2002; 2002WO-IB003040.
XX
PR 07-FEB-2001; 2001FR-00001659.
XX
PA (INSP) INST PASTEUR.
PA (CNRS) CNRS CENT NAT RECH SCI.
XX
PI Duchaud E, Taourit S, Glaser P, Frangeul L, Kunst F, Danchin A;
PI Buchrieser C;
XX
DR WPI; 2003-148459/14.
XX
PT Genomic sequence of Photorhabdus luminescens and encoded polypeptides,
PT useful e.g. as therapeutic antimicrobials and agricultural pesticides.
XX
PS Claim 2; SEQ ID NO 1568; 1205pp; French.
XX
CC The invention relates to the isolation of genes and their encoded
CC proteins from Photorhabdus luminescens. The isolated sequences are
CC sources of probes and primers for detecting the genome of P. luminescens
CC and related species; to study polymorphisms; for gene analysis and for
CC detection/amplification of the genes. Antibodies (Ab) raised against the
CC polypeptides encoded by the genes are used for detection/identification
CC of P. luminescens, e.g. in foods. The genes, proteins, Ab and cells that
CC carry a gene-containing vector are used to select compounds that
CC modulate, regulate, induce or inhibit expression of the genes in plants,
CC animals or microorganisms other than P. luminescens and are able to alter
CC response or sensitivity to toxins and antibiotics produced by P.
CC luminescens. Cells transformed to express the genes are useful for
CC recombinant production of the proteins, particularly toxins and
CC antibacterials useful as insecticides, bactericides and fungicides. The
CC genes, proteins, vectors containing the genes and Ab are also useful
CC therapeutically (to treat microbial infection by bacteria or fungi that
CC are sensitive to P. luminescens-encoded toxins or antibiotics) and as
CC biopesticides. Other uses of the genes and the proteins are as virulence
CC factors and for identifying targets of human diseases for which P.
CC luminescens is a model (particularly plague and whooping cough). This
CC sequence represents one of the isolated P. luminescens proteins
XX
SQ Sequence 285 AA;

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  Query Match             100.0%;  Score 25;  DB 6;  Length 285;
  Best Local Similarity   50.0%;  Pred. No. 6.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
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Db          1 MQQKVVHI 8


RESULT 173
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ID   ABR41580 standard; protein; 285 AA.
XX
AC   ABR41580;
XX
DT   02-JUN-2003  (first entry)
XX
DE   Human DITHP antigen recognition protein.
XX
KW   Human; dithp; diagnostic and therapeutic polynucleotide; diagnosis;
KW   cancer; cell proliferative disorder; autoimmune disorder;
KW   inflammatory disorder; infection; hormonal disorder; metabolic disorder;
KW   neurological disorder; gastrointestinal disorder; transport disorder;
KW   connective tissue disorder; drug screening; proteome analysis;
KW   gene therapy; antisense therapy; genotyping; transgenic animal; knock in;
KW   disease model; toxicological testing; transcript imaging;
KW   antigen recognition.
XX
OS   Homo sapiens.
XX
PN   WO200297031-A2.
XX
PD   05-DEC-2002.
XX
PF   27-MAR-2002; 2002WO-US010056.
XX
PR   28-MAR-2001; 2001US-0279619P.
PR   29-MAR-2001; 2001US-0280067P.
PR   29-MAR-2001; 2001US-0280068P.
PR   16-MAY-2001; 2001US-0291280P.
PR   17-MAY-2001; 2001US-0291829P.
PR   17-MAY-2001; 2001US-0291849P.
PR   19-JUN-2001; 2001US-0299428P.
PR   20-JUN-2001; 2001US-0299776P.
PR   20-JUN-2001; 2001US-0300001P.
XX
PA   (INCY-) INCYTE GENOMICS INC.
XX
PI   Daffo A, Jones AL, Tran AB, Dahl CR, Gietzen D, Chinn J;
PI   Dufour GE, Hillman JL, Yu JY, Tuason O, Yap PE, Amshey SR;
PI   Daughtery SC, Dam TC, Liu TF, Nguyen DA, Kleefeld Y, Gerstin EH;
PI   Peralta CH, David MH, Lewis SA, Chen AJ, Panzer SR, Harris B;
PI   Flores V, Marwaha R, Lo A, Lan RY, Urashka ME;
XX
DR   WPI; 2003-129518/12.
DR   N-PSDB; ACC46518.
XX
PT   Novel human diagnostic and therapeutic polypeptide useful for identifying
PT   test compound which specifically binds to a polypeptide encoded by human
PT   diagnostic and therapeutic polynucleotide, and to induce antibodies.
XX
PS   Claim 27; SEQ ID NO 1115; 591pp; English.
XX
CC   The invention relates to novel human diagnostic and therapeutic
CC   polynucleotides designated dithp (ACC46080-ACC46749) and to their encoded
CC   proteins (DITHP; ABR41136-ABR41812). The invention also relates to
CC   polynucleotide sequences at least 90% identical to the dithp cDNA
CC   sequences of the invention; recombinant vectors, host cells and
CC   transgenic organisms comprising a dithp nucleic acid sequence; the
CC   recombinant production of DITHP proteins; antibodies specific for DITHP
CC   proteins; microarrays comprising dithp nucleic acid sequences; methods of
CC   detecting dithp nucleotide and protein sequences; methods of screening
CC   for compounds which specifically bind a DITHP protein; and methods of
CC   assessing the toxicity of test compounds using a dithp hybridisation
CC   probe. Dithp nucleic acid sequences and DITHP proteins may be used in the
CC   diagnosis of a wide variety of conditions including cancer and other cell
CC   proliferative disorders; autoimmune or inflammatory disorders; bacterial,
CC   viral, fungal or parasitic infections; hormonal disorders; metabolic
CC   disorders; neurological disorders; gastrointestinal disorders; transport
CC   disorders; and connective tissue disorders. They may also be used to
CC   screen for modulators of protein activity or gene expression. DITHP
CC   proteins can additionally be used in analysis of the proteome of a tissue
CC   or cell type and to induce antibodies. The dithp nucleic acids are
CC   additionally useful in somatic or germline gene therapy of the disorders
CC   mentioned above, as a source of antisense sequences, as a source of
CC   probes and primers, in genotyping and identification of individuals, in
CC   the generation of transgenic animal models of human disease or knock in
CC   humanised animals, in toxicological testing, and in transcript imaging.
CC   The present sequence represents a DITHP protein which has antigen
CC   recognition activity. Note: The sequence data for this patent did not
CC   form part of the printed specification, but was obtained in electronic
CC   format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 285 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 285;
  Best Local Similarity   50.0%;  Pred. No. 6.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
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Db         72 FQGRVSHI 79


RESULT 174
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AC   AAG38076;
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DT   18-OCT-2000  (first entry)
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DE   Arabidopsis thaliana protein fragment SEQ ID NO: 46919.
XX
KW   Protein identification; signal transduction pathway; metabolic pathway;
KW   hybridisation assay; genetic mapping; gene expression control; promoter;
KW   termination sequence.
XX
OS   Arabidopsis thaliana.
XX
PN   EP1033405-A2.
XX
PD   06-SEP-2000.
XX
PF   25-FEB-2000; 2000EP-00301439.
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PR   25-FEB-1999;   99US-0121825P.
PR   05-MAR-1999;   99US-0123180P.
PR   09-MAR-1999;   99US-0123548P.
PR   23-MAR-1999;   99US-0125788P.
PR   25-MAR-1999;   99US-0126264P.
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PR   19-APR-1999;   99US-0130077P.
PR   21-APR-1999;   99US-0130449P.
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PR 06-MAY-1999; 99US-0132486P.
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PR 14-MAY-1999; 99US-0134219P.
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PR 14-MAY-1999; 99US-0134370P.
PR 18-MAY-1999; 99US-0134768P.
PR 19-MAY-1999; 99US-0134941P.
PR 20-MAY-1999; 99US-0135124P.
PR 21-MAY-1999; 99US-0135353P.
PR 24-MAY-1999; 99US-0135629P.
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PR 27-MAY-1999; 99US-0136392P.
PR 28-MAY-1999; 99US-0136782P.
PR 01-JUN-1999; 99US-0137222P.
PR 03-JUN-1999; 99US-0137528P.
PR 04-JUN-1999; 99US-0137502P.
PR 07-JUN-1999; 99US-0137724P.
PR 08-JUN-1999; 99US-0138094P.
PR 10-JUN-1999; 99US-0138540P.
PR 10-JUN-1999; 99US-0138847P.
PR 14-JUN-1999; 99US-0139119P.
PR 16-JUN-1999; 99US-0139452P.
PR 16-JUN-1999; 99US-0139453P.
PR 17-JUN-1999; 99US-0139492P.
PR 18-JUN-1999; 99US-0139454P.
PR 18-JUN-1999; 99US-0139455P.
PR 18-JUN-1999; 99US-0139456P.
PR 18-JUN-1999; 99US-0139457P.
PR 18-JUN-1999; 99US-0139458P.
PR 18-JUN-1999; 99US-0139459P.
PR 18-JUN-1999; 99US-0139460P.
PR 18-JUN-1999; 99US-0139461P.
PR 18-JUN-1999; 99US-0139462P.
PR 18-JUN-1999; 99US-0139463P.
PR 18-JUN-1999; 99US-0139750P.
PR 18-JUN-1999; 99US-0139763P.
PR 21-JUN-1999; 99US-0139817P.
PR 22-JUN-1999; 99US-0139899P.
PR 23-JUN-1999; 99US-0140353P.
PR 23-JUN-1999; 99US-0140354P.
PR 24-JUN-1999; 99US-0140695P.
PR 28-JUN-1999; 99US-0140823P.
PR 29-JUN-1999; 99US-0140991P.
PR 30-JUN-1999; 99US-0141287P.
PR 01-JUL-1999; 99US-0141842P.
PR 01-JUL-1999; 99US-0142154P.
PR 02-JUL-1999; 99US-0142055P.
PR 06-JUL-1999; 99US-0142390P.
PR 08-JUL-1999; 99US-0142803P.
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PR 16-JUL-1999; 99US-0144085P.
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PR 19-JUL-1999; 99US-0144332P.
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PR 23-JUL-1999; 99US-0145145P.
PR 23-JUL-1999; 99US-0145218P.
PR 23-JUL-1999; 99US-0145224P.
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PR 27-JUL-1999; 99US-0145913P.
PR 27-JUL-1999; 99US-0145918P.
PR 27-JUL-1999; 99US-0145919P.
PR 28-JUL-1999; 99US-0145951P.
PR 02-AUG-1999; 99US-0146386P.
PR 02-AUG-1999; 99US-0146388P.
PR 02-AUG-1999; 99US-0146389P.
PR 03-AUG-1999; 99US-0147038P.
PR 04-AUG-1999; 99US-0147204P.
PR 04-AUG-1999; 99US-0147302P.
PR 05-AUG-1999; 99US-0147192P.
PR 05-AUG-1999; 99US-0147260P.
PR 06-AUG-1999; 99US-0147303P.
PR 06-AUG-1999; 99US-0147416P.
PR 09-AUG-1999; 99US-0147493P.
PR 09-AUG-1999; 99US-0147935P.
PR 10-AUG-1999; 99US-0148171P.
PR 11-AUG-1999; 99US-0148319P.
PR 12-AUG-1999; 99US-0148341P.
PR 13-AUG-1999; 99US-0148565P.
PR 13-AUG-1999; 99US-0148684P.
PR 16-AUG-1999; 99US-0149368P.
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PR 20-AUG-1999; 99US-0149722P.
PR 20-AUG-1999; 99US-0149723P.
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PR 23-AUG-1999; 99US-0149902P.
PR 23-AUG-1999; 99US-0149930P.
PR 25-AUG-1999; 99US-0150566P.
PR 26-AUG-1999; 99US-0150884P.
PR 27-AUG-1999; 99US-0151065P.
PR 27-AUG-1999; 99US-0151066P.
PR 27-AUG-1999; 99US-0151080P.
PR 30-AUG-1999; 99US-0151303P.
PR 31-AUG-1999; 99US-0151438P.
PR 01-SEP-1999; 99US-0151930P.
PR 07-SEP-1999; 99US-0152363P.
PR 10-SEP-1999; 99US-0153070P.
PR 13-SEP-1999; 99US-0153758P.
PR 15-SEP-1999; 99US-0154018P.
PR 16-SEP-1999; 99US-0154039P.
PR 20-SEP-1999; 99US-0154779P.
PR 22-SEP-1999; 99US-0155139P.
PR 23-SEP-1999; 99US-0155486P.
PR 24-SEP-1999; 99US-0155659P.
PR 28-SEP-1999; 99US-0156458P.
PR 29-SEP-1999; 99US-0156596P.
PR 04-OCT-1999; 99US-0157117P.
PR 05-OCT-1999; 99US-0157753P.
PR 06-OCT-1999; 99US-0157865P.
PR 07-OCT-1999; 99US-0158029P.
PR 08-OCT-1999; 99US-0158232P.
PR 12-OCT-1999; 99US-0158369P.
PR 13-OCT-1999; 99US-0159293P.
PR 13-OCT-1999; 99US-0159294P.
PR 13-OCT-1999; 99US-0159295P.
PR 14-OCT-1999; 99US-0159329P.
PR 14-OCT-1999; 99US-0159330P.
PR 14-OCT-1999; 99US-0159331P.
PR 14-OCT-1999; 99US-0159637P.
PR 14-OCT-1999; 99US-0159638P.
PR 18-OCT-1999; 99US-0159584P.
PR 21-OCT-1999; 99US-0160741P.
PR 21-OCT-1999; 99US-0160767P.
PR 21-OCT-1999; 99US-0160768P.
PR 21-OCT-1999; 99US-0160770P.

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PR   21-OCT-1999;   99US-0160814P.
PR   21-OCT-1999;   99US-0160815P.
PR   22-OCT-1999;   99US-0160980P.
PR   22-OCT-1999;   99US-0160981P.
PR   22-OCT-1999;   99US-0160989P.
PR   25-OCT-1999;   99US-0161404P.
PR   25-OCT-1999;   99US-0161405P.
PR   25-OCT-1999;   99US-0161406P.
PR   26-OCT-1999;   99US-0161359P.
PR   26-OCT-1999;   99US-0161360P.
PR   26-OCT-1999;   99US-0161361P.
PR   28-OCT-1999;   99US-0161920P.
PR   28-OCT-1999;   99US-0161992P.
PR   28-OCT-1999;   99US-0161993P.
PR   29-OCT-1999;   99US-0162142P.

  Query Match             100.0%;  Score 25;  DB 3;  Length 287;
  Best Local Similarity   50.0%;  Pred. No. 6.4e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        240 KQPDVLHI 247


RESULT 175
ABG15271
ID   ABG15271 standard; protein; 289 AA.
XX
AC   ABG15271;
XX
DT   18-FEB-2002  (first entry)
XX
DE   Novel human diagnostic protein #15262.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   N-PSDB; AAS79458.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 20; SEQ ID NO 45630; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC   amino acid sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 289 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 289;
  Best Local Similarity   50.0%;  Pred. No. 6.5e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db          8 SQFIVEHI 15


RESULT 176
AAG82170
ID   AAG82170 standard; protein; 292 AA.
XX
AC   AAG82170;
XX
DT   03-SEP-2001  (first entry)
XX
DE   S. epidermidis open reading frame protein sequence SEQ ID NO:1434.
XX
KW   Staphylococcus epidermidis SR1 strain; infection; diagnosis; vaccination;
KW   endocarditis.
XX
OS   Staphylococcus epidermidis.
XX
PN   WO200134809-A2.
XX
PD   17-MAY-2001.
XX
PF   09-NOV-2000; 2000WO-US030782.
XX
PR   09-NOV-1999;   99US-0164258P.
XX
PA   (GLAX ) GLAXO GROUP LTD.
XX
PI   Kimmerly WJ;
XX
DR   WPI; 2001-316495/33.
DR   N-PSDB; AAH53020.
XX
PT   Nucleic acids encoding polypeptides from Staphylococcus epidermidis,
PT   useful for vaccinating against infections, e.g. endocarditis.
XX
PS   Claim 18; Page 406; 2188pp; English.
XX
CC   AAH52304 to AAH53970 represent nucleic acids (I) encoding polypeptides
CC   (II), given in AAG81454 to AAG83120, from Staphylococcus epidermidis. (I)
CC   and (II) can have antibacterial activity and therefore can be used in
CC   vaccination. The nucleic acids (I) may be used to produce the S.
CC   epidermidis polypeptides (II) via the production of vectors containing
CC   them which are used to produce hosts cells which express the
CC   polypeptides. The polypeptides (II) (and/or nucleic acids) may then be
CC   used to vaccinate subjects and to raise antibodies against the bacteria.
CC   The polypeptides may also be used to assay for other inhibitors of their
CC   activity and therefore identify compounds that may be used for the
CC   treatment of S. epidermidis infections, e.g. endocarditis. AAH53971 to
CC   AAH55090 represent specifically claimed S. epidermidis genomic DNA
CC   polynucleotide sequences from the present invention. AAH55091 to AAH55098
CC   represent oligonucleotide sequences and primers which are used in the
CC   exemplification of the present invention. N.B. The present invention
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CC   specifically claims all the polynucleotide sequences given in the
CC   sequence listing of the present specification, however the sequence
CC   listing only goes up to SEQ ID NO:4454 so even though sequences are given
CC   in the disclosure for SEQ ID NO:4465 to 4472, no sequences are present
CC   for SEQ ID NO:4455 to 4464
XX
SQ   Sequence 292 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 292;
  Best Local Similarity   50.0%;  Pred. No. 6.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         39 IQGFVRHI 46


RESULT 177
ABM73000
ID   ABM73000 standard; protein; 292 AA.
XX
AC   ABM73000;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Staphylococcus aureus protein #2240.
XX
KW   Antibacterial; vaccine; gene therapy; infection; sepsis; diagnosis;
KW   enzymatic assay; antibiotic target.
XX
OS   Staphylococcus aureus.
XX
PN   WO200294868-A2.
XX
PD   28-NOV-2002.
XX
PF   27-MAR-2002; 2002WO-IB002637.
XX
PR   27-MAR-2001; 2001GB-00007661.
XX
PA   (CHIR-) CHIRON SPA.
XX
PI   Masignani V,  Mora M,  Scarselli M;
XX
DR   WPI; 2003-120786/11.
DR   N-PSDB; ACF74560.
XX
PT   New Staphylococcus aureus protein, useful as a vaccine for treating or
PT   preventing Staphylococcal infection, specifically an infection caused by
PT   S. aureus, e.g. sepsis.
XX
PS   Claim 1; SEQ ID NO 4480; 49pp; English.
XX
CC   The invention relates to novel genes and encoded proteins from
CC   Staphylococcus aureus. A composition comprising the S. aureus protein, a
CC   nucleic acid encoding the protein, or an antibody to the protein, is
CC   useful as a pharmaceutical, particularly as a vaccine for treating or
CC   preventing infection due to Staphylococcus bacteria, specifically an
CC   infection caused by S. aureus. The composition is particularly useful for
CC   treating or preventing sepsis in a patient. The composition can also be
CC   used for diagnostics. The protein is also used in an assay for enzymatic
CC   studies and as a target for antibiotics. This sequence represents one of
CC   the novel S. aureus proteins of the invention
XX
SQ   Sequence 292 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 292;
  Best Local Similarity   50.0%;  Pred. No. 6.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         39 IQGFVRHI 46


RESULT 178
ADB08044
ID   ADB08044 standard; protein; 295 AA.
XX
AC   ADB08044;
XX
DT   20-NOV-2003  (first entry)
XX
DE   Alloiococcus otitis antigenic protein SEQ ID NO:1984.
XX
KW   Alloiococcus otitidis; antigenic protein; immunogenic; immunisation;
KW   gene therapy; Gram-positive bacterium; infection.
XX
OS   Alloiococcus otitis.
XX
PN   WO2003048304-A2.
XX
PD   12-JUN-2003.
XX
PF   25-NOV-2002; 2002WO-US036123.
XX
PR   29-NOV-2001; 2001US-0333777P.
PR   18-NOV-2002; 2002US-0426742P.
XX
PA   (AMHP ) WYETH HOLDINGS CORP.
XX
PI   Fletcher LD,  Mcmichael JC,  Russell DP,  Zagursky RJ;
XX
DR   WPI; 2003-505284/47.
DR   N-PSDB; ADB08043.
XX
PT   New Alloiococcus otitidis polynucleotides and polypeptides, useful for
PT   treating and diagnosing diseases, drug screening assays and monitoring of
PT   effects during drug clinical trials.
XX
PS   Claim 33; SEQ ID NO 1984; 1019pp; English.
XX
CC   The present invention describes an isolated polynucleotide (I) of
CC   Alloiococcus otitidis genomic DNA, which encodes an antigenic protein.
CC   Alloiococcus otitidis is a Gram-positive bacterium. Also described: (1)
CC   an isolated polypeptide that is encoded by the polynucleotide (I); (2) an
CC   expression vector comprising the novel isolated polynucleotide (I), its
CC   complement, degenerate variant or fragment; (3) a genetically engineered
CC   host cell, transfected, transformed or infected with the vector of (2);
CC   (4) an antibody specific for the polypeptide of (1); (5) an immunogenic
CC   composition comprising the polypeptide, its complement, biological
CC   equivalent or fragment, or the polynucleotide that is comprised in the
CC   expression vector; (6) a pharmaceutical composition comprising the
CC   polypeptide of (1) and a carrier; (7) a protein chip comprising an array
CC   of the polypeptides of (1), their biological equivalent or fragment; (8)
CC   immunising against Alloiococcus otitidis by administering to a host the
CC   immunogenic composition; (9) detecting and/or identifying Alloiococcus
CC   otitidis in the biological sample; (10) a kit comprising a container
CC   containing the novel polynucleotide, its degenerate variant or fragment,
CC   or the antibody of (4); and (11) producing a polypeptide by culturing the
CC   genetically engineered host cell under conditions suitable to produce the
CC   polypeptide from the culture. (I) can be used in gene therapy. The
CC   polynucleotides, polypeptides, antibodies and compositions of the present
CC   invention can be used for treating and diagnosing diseases, drug
CC   screening assays and monitoring of effects during drug clinical trials.
CC   The polynucleotides are useful for expressing and detecting Alloiococcus
CC   otitidis. The present sequence represents an Alloiococcus otitidis
CC   antigen protein from the present invention.
XX
SQ   Sequence 295 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 295;
  Best Local Similarity   50.0%;  Pred. No. 6.6e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
```

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              :|::|:||
Db        274 SQDGVAHI 281


RESULT 179
AAY39883
ID   AAY39883 standard; peptide; 296 AA.
XX
AC   AAY39883;
XX
DT   07-DEC-1999  (first entry)
XX
DE   MHC Class II p41 specific region.
XX
KW   Asparaginyl endopeptidase; AEP; inhibitor; immune response modulation;
KW   Class II MHC molecule; major histocompatibility complex; coeliac disease;
KW   antigenic peptide; autoimmune disease; rheumatoid arthritis; therapy;
KW   insulin-dependent diabetes mellitus; multiple sclerosis; Grave's disease;
KW   Hashimoto's thyroiditis; myasthenia gravis; pemphigus vulgaris;
KW   systemic lupus erythematosus; allergic reaction; transplant surgery;
KW   hypersensitivity reaction.
XX
OS   Homo sapiens.
XX
PN   WO9948910-A1.
XX
PD   30-SEP-1999.
XX
PF   26-MAR-1999;   99WO-GB000963.
XX
PR   26-MAR-1998;   98GB-00006442.
PR   28-MAY-1998;   98US-0086966P.
XX
PA   (UYDU-) UNIV DUNDEE.
XX
PI   Watts C;
XX
DR   WPI; 1999-580415/49.
XX
PT   Use of asparaginyl endopeptidase inhibitors as modulators of immune
PT   response for treating autoimmune diseases, allergic or hypersensitivity
PT   reactions or transplant rejection.
XX
PS   Disclosure; Page 5; 93pp; English.
XX
CC   This sequence represents the p41 specific region of the class II MHC
CC   invariant chain, and is a substrate for asparaginyl endopeptidase (AEP).
CC   The invention relates to a method for modulating the immune response of a
CC   patient by administering to the patient an inhibitor of AEP. The AEP
CC   inhibitors can reduce the competency of Class II MHC molecules for
CC   binding antigenic peptides and reduce the presentation of antigenic
CC   peptides by Class II MHC molecules. The methods can be used for treating
CC   a patient who has, or is at risk of a disease involving MHC Class II
CC   molecules such as an autoimmune disease, e.g. rheumatoid arthritis,
CC   insulin-dependent diabetes mellitus, multiple sclerosis, Hashimoto's
CC   thyroiditis, coeliac disease, myasthenia gravis, pemphigus vulgaris,
CC   systemic lupus erythematosus or Grave's disease. The inhibitors can also
CC   be used to treat a patent who has or is at risk of an allergic or
CC   hypersensitivity reaction or a patient who has or is to undergo a
CC   transplant surgery
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 180
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```
ABU05274
ID   ABU05274 standard; protein; 296 AA.
XX
AC   ABU05274;
XX
DT   29-JAN-2003  (first entry)
XX
DE   Human expressed protein tag (EPT) #1940.
XX
KW   Translational profiling; expressed protein tag; EPT; kinase; phosphatase;
KW   protease; protease inhibitor; transporter; cytoskeletal protein;
KW   receptor; transcription factor; cancer; MHC;
KW   major histocompatability complex; myeloma; colon cancer; gastric cancer;
KW   adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.
XX
OS   Homo sapiens.
XX
PN   WO200278524-A2.
XX
PD   10-OCT-2002.
XX
PF   28-MAR-2002; 2002WO-US009671.
XX
PR   28-MAR-2001; 2001US-0279495P.
PR   21-MAY-2001; 2001US-0292544P.
PR   08-AUG-2001; 2001US-0310801P.
PR   01-OCT-2001; 2001US-0326370P.
PR   04-DEC-2001; 2001US-0336780P.
PR   20-FEB-2002; 2002US-0358985P.
XX
PA   (ZYCO-) ZYCOS INC.
XX
PI   Chicz RM,  Tomlinson AJ,  Urban RG;
XX
DR   WPI; 2003-040607/03.
XX
PT   New polypeptides (e.g. kinases, phosphatases, proteases, transporters,
PT   cytoskeletal proteins, receptors or transcription factors), useful for
PT   treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
PT   leukemia.
XX
PS   Example 2; SEQ ID NO 1940; 134pp; English.
XX
CC   The invention describes a purified polypeptide, which comprises a
CC   fragment of a kinase, phosphatase, protease, protease inhibitor,
CC   transporter, cytoskeletal protein, receptor or transcription factor. The
CC   polypeptide is useful as an immunogenic composition for eliciting in a
CC   mammal an immunogenic response directed against any of the purified
CC   polypeptide. The purified polypeptide, or the antibody that binds to this
CC   polypeptide, is useful for treating cancer. The polypeptide is also
CC   useful for identifying compounds that binds to a naturally processed
CC   class I or class II MHC-binding polypeptide. The polypeptides and
CC   polynucleotides are particularly useful for treating or preventing
CC   myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,
CC   lymphoma or leukaemia. These are also useful for screening agents for
CC   treating the above mentioned diseases. This sequence represents an
CC   expressed protein tag (EPT) isolated from human tissue for translational
CC   profiling. Note: This sequence does not appear in the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 181
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```
ABU07242
ID   ABU07242 standard; protein; 296 AA.
XX
AC   ABU07242;
XX
DT   29-JAN-2003  (first entry)
XX
DE   Human expressed protein tag (EPT) #1943.
XX
KW   Translational profiling; expressed protein tag; EPT; kinase; phosphatase;
KW   protease; protease inhibitor; transporter; cytoskeletal protein;
KW   receptor; transcription factor; cancer; MHC;
KW   major histocompatability complex; myeloma; colon cancer; gastric cancer;
KW   adenocarcinoma; sarcoma; melanoma; lymphoma; leukaemia.
XX
OS   Homo sapiens.
XX
PN   WO200278524-A2.
XX
PD   10-OCT-2002.
XX
PF   28-MAR-2002; 2002WO-US009671.
XX
PR   28-MAR-2001; 2001US-0279495P.
PR   21-MAY-2001; 2001US-0292544P.
PR   08-AUG-2001; 2001US-0310801P.
PR   01-OCT-2001; 2001US-0326370P.
PR   04-DEC-2001; 2001US-0336780P.
PR   20-FEB-2002; 2002US-0358985P.
XX
PA   (ZYCO-) ZYCOS INC.
XX
PI   Chicz RM,  Tomlinson AJ,  Urban RG;
XX
DR   WPI; 2003-040607/03.
XX
PT   New polypeptides (e.g. kinases, phosphatases, proteases, transporters,
PT   cytoskeletal proteins, receptors or transcription factors), useful for
PT   treating cancer, e.g. colon cancer, gastric cancer, sarcoma, lymphoma or
PT   leukemia.
XX
PS   Example 2; SEQ ID NO 1943; 134pp; English.
XX
CC   The invention describes a purified polypeptide, which comprises a
CC   fragment of a kinase, phosphatase, protease, protease inhibitor,
CC   transporter, cytoskeletal protein, receptor or transcription factor. The
CC   polypeptide is useful as an immunogenic composition for eliciting in a
CC   mammal an immunogenic response directed against any of the purified
CC   polypeptide. The purified polypeptide, or the antibody that binds to this
CC   polypeptide, is useful for treating cancer. The polypeptide is also
CC   useful for identifying compounds that binds to a naturally processed
CC   class I or class II MHC-binding polypeptide. The polypeptides and
CC   polynucleotides are particularly useful for treating or preventing
CC   myeloma, colon cancer, gastric cancer, adenocarcinoma, sarcoma, melanoma,
CC   lymphoma or leukaemia. These are also useful for screening agents for
CC   treating the above mentioned diseases. This sequence represents an
CC   expressed protein tag (EPT) isolated from human tissue for translational
CC   profiling. Note: This sequence does not appear in the printed
CC   specification but was obtained in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220

RESULT 182
```

```
ADE63460
ID   ADE63460 standard; protein; 296 AA.
XX
AC   ADE63460;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P04233, SEQ ID NO 9399.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P04233.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
```

```
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 183
ADE63398
ID   ADE63398 standard; protein; 296 AA.
XX
AC   ADE63398;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P04233, SEQ ID NO 9337.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P04233.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 184
ADE63394
ID   ADE63394 standard; protein; 296 AA.
XX
AC   ADE63394;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P04233, SEQ ID NO 9333.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P04233.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
```

```
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 185
ADE63386
ID   ADE63386 standard; protein; 296 AA.
XX
AC   ADE63386;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P04233, SEQ ID NO 9325.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P04233.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 186
ADE63390
ID   ADE63390 standard; protein; 296 AA.
XX
AC   ADE63390;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P04233, SEQ ID NO 9329.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P04233.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
```

```
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 187
ADD46361
ID   ADD46361 standard; protein; 296 AA.
XX
AC   ADD46361;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P04233, SEQ ID NO 12039.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P04233.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 188
ADE63464
ID   ADE63464 standard; protein; 296 AA.
XX
AC   ADE63464;
XX
DT   29-JAN-2004  (first entry)
XX
DE   Human Protein P04233, SEQ ID NO 9403.
XX
KW   Human; pain; neuronal tissue; gene therapy;
KW   spinal segmental nerve injury; chronic constriction injury; CCI;
KW   spared nerve injury; SNI; Chung.
XX
OS   Homo sapiens.
XX
PN   WO2003016475-A2.
XX
PD   27-FEB-2003.
XX
PF   14-AUG-2002; 2002WO-US025765.
XX
PR   14-AUG-2001; 2001US-0312147P.
PR   01-NOV-2001; 2001US-0346382P.
PR   26-NOV-2001; 2001US-0333347P.
XX
PA   (GEHO ) GEN HOSPITAL CORP.
PA   (FARB ) BAYER AG.
XX
PI   Woolf C,  D'urso D,  Befort K,  Costigan M;
XX
DR   WPI; 2003-268312/26.
DR   GENBANK; P04233.
XX
PT   New composition comprising two or more isolated polypeptides, useful for
PT   preparing a medicament for treating pain in an animal.
XX
PS   Claim 1; Page; 1017pp; English.
XX
CC   The invention discloses a composition comprising two or more isolated rat
CC   or human polynucleotides or a polynucleotide which represents a fragment,
CC   derivative or allelic variation of the nucleic acid sequence. Also
CC   claimed are a vector comprising the novel polynucleotide, a host cell
CC   comprising the vector, a method for identifying a nucleotide sequence
```

```
CC   which is differentially regulated in an animal subjected to pain and a
CC   kit to perform the method, an array, a method for identifying an agent
CC   that increases or decreases the expression of the polynucleotide sequence
CC   that is differentially expressed in neuronal tissue of a first animal
CC   subjected to pain, a method for identifying a compound which regulates
CC   the expression of a polynucleotide sequence which is differentially
CC   expressed in an animal subjected to pain, a method for identifying a
CC   compound that regulates the activity of one or more of the
CC   polynucleotides, a method for producing a pharmaceutical composition, a
CC   method for identifying a compound or small molecule that regulates the
CC   activity in an animal of one or more of the polypeptides given in the
CC   specification, a method for identifying a compound useful in treating
CC   pain and a pharmaceutical composition comprising the one or more
CC   polypeptides or their antibodies. The polynucleotide or the compound that
CC   modulates its activity is useful for preparing a medicament for treating
CC   pain (e.g. spinal segmental nerve injury (Chung), chronic constriction
CC   injury (CCI) and spared nerve injury (SNI)) in an animal (e.g. gene
CC   therapy). The sequence presented is a human protein (shown in Table 2 of
CC   the specification) which is differentially expressed during pain. Note:
CC   The sequence data for this patent did not form part of the printed
CC   specification, but was obtained in electronic form directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences.
XX
SQ   Sequence 296 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 296;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        213 CQEEVSHI 220


RESULT 189
AAY38784
ID   AAY38784 standard; protein; 297 AA.
XX
AC   AAY38784;
XX
DT   08-OCT-1999  (first entry)
XX
DE   Neisseria gonorrhoeae antigenic protein encoded by ORF138.
XX
KW   Neisseria meningitidis; Neisseria gonorrhoeae; antigen; vaccine;
KW   treatment; Neisseria infection; meningitis; septicaemia; gonorrhea.
XX
OS   Neisseria gonorrhoeae.
XX
PN   WO9924578-A2.
XX
PD   20-MAY-1999.
XX
PF   09-OCT-1998;   98WO-IB001665.
XX
PR   06-NOV-1997;   97GB-00023516.
PR   14-NOV-1997;   97GB-00024190.
PR   18-NOV-1997;   97GB-00024386.
PR   27-NOV-1997;   97GB-00025158.
PR   10-DEC-1997;   97GB-00026147.
PR   14-JAN-1998;   98GB-00000759.
PR   01-SEP-1998;   98GB-00019016.
XX
PA   (CHIR-) CHIRON SPA.
XX
PI   Masignani V,  Rappuoli R,  Pizza M,  Scarlato V,  Grandi G;
XX
DR   WPI; 1999-327407/27.
DR   N-PSDB; AAZ12219.
XX
PT   Proteins from Neisseria meningitidis and N. gonorrhoeae useful for
PT   diagnosis, treatment and prevention of infection.
XX
PS   Claim 4; Page 328; 524pp; English.
XX
CC   Amino acid sequences AAY38499-Y38944 represent Neisseria meningitidis and
CC   N. gonorrhoeae antigenic proteins. They are encoded by open reading
CC   frames (ORFs) AAZ11972-Z12358. The antigenic proteins, their fragments,
CC   their nucleic acids and antibodies are used for diagnosis, prevention (as
CC   vaccines) or treatment of Neisseria infections, such as meningitis,
CC   septicaemia and gonorrhea. Both organisms are closely related. Fragments
CC   of the nucleic acids are useful as hybridisation probes and antisense
CC   reagents
XX
SQ   Sequence 297 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 297;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        247 GQGFVLHI 254


RESULT 190
AAY74947
ID   AAY74947 standard; protein; 297 AA.
XX
AC   AAY74947;
XX
DT   12-SEP-2003  (revised)
DT   21-MAR-2000  (first entry)
XX
DE   Neisseria gonorrheae ORF 505 protein sequence SEQ ID NO:1368.
XX
KW   Neisseria meningitidis; Neisseria gonorrheae; antigen; vaccine;
KW   antigenic; diagnosis; immunogenic; infection; meningitis; septicaemia;
KW   antibacterial; gene therapy.
XX
OS   Neisseria gonorrhoeae.
XX
PN   WO9957280-A2.
XX
PD   11-NOV-1999.
XX
PF   30-APR-1999;   99WO-US009346.
XX
PR   01-MAY-1998;   98US-0083758P.
PR   31-JUL-1998;   98US-0094869P.
PR   02-SEP-1998;   98US-0098994P.
PR   02-SEP-1998;   98US-0099062P.
PR   09-OCT-1998;   98US-0103749P.
PR   09-OCT-1998;   98US-0103794P.
PR   09-OCT-1998;   98US-0103796P.
PR   25-FEB-1999;   99US-0121528P.
XX
PA   (CHIR ) CHIRON CORP.
PA   (GENO-) INST GENOMIC RES.
XX
PI   Fraser C,  Galeotti C,  Grandi G,  Hickey E,  Masignani V,  Mora M;
PI   Petersen J,  Pizza M,  Rappuoli R,  Ratti G,  Scalato E,  Scarselli M;
PI   Tettelin H,  Venter JC;
XX
DR   WPI; 2000-062150/05.
DR   N-PSDB; AAZ53709.
XX
PT   Novel Neisserial polypeptides predicted to be useful antigens for
PT   vaccines and diagnostics.
XX
PS   Claim 2; Page 744; 1453pp; English.
XX
CC   AAZ53015 to AAZ54536, AAZ54577 to AAZ54615, and AAY74253 to AAY75941
CC   represent novel Neisseria meningitis and N. gonorrheae polynucleotides
CC   and polypeptides. AAZ54537 to AAZ54576 and AAZ54616 to AAZ55473 represent
CC   PCR primers used in the exemplification of the present invention. The
```

```
CC   polypeptides, the polynucleotides, antibodies and compositions of the
CC   invention can be used as vaccines, as diagnostic reagents, and as
CC   immunogenic compositions. The polypeptides can be used in the manufacture
CC   of medicaments for treating or preventing infection due to Neisserial
CC   bacteria (e.g. meningitis and septicaemia), to detect the presence of
CC   Neisseria bacteria, or to raise antibodies. They may also be used to
CC   screen for agonists or antagonists, which may themselves have use as
CC   antibacterial agents. The polynucleotides of the invention may also be
CC   used in gene therapy protocols. (Updated on 12-SEP-2003 to standardise OS
CC   field)
XX
SQ   Sequence 297 AA;

  Query Match             100.0%;  Score 25;  DB 3;  Length 297;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        247 GQGFVLHI 254


RESULT 191
ABP38279
ID   ABP38279 standard; protein; 297 AA.
XX
AC   ABP38279;
XX
DT   24-JUL-2002  (first entry)
XX
DE   Staphylococcus epidermidis ORF amino acid sequence SEQ ID NO:3124.
XX
KW   Staphylococcus epidermidis; open reading frame; ORF; bacterial infection;
KW   antibacterial; gene therapy.
XX
OS   Staphylococcus epidermidis.
XX
PN   US6380370-B1.
XX
PD   30-APR-2002.
XX
PF   13-AUG-1998;   98US-00134001.
XX
PR   14-AUG-1997;   97US-0055779P.
PR   08-NOV-1997;   97US-0064964P.
XX
PA   (GENO-) GENOME THERAPEUTICS CORP.
XX
PI   Doucette-Stamm LA,  Bush D;
XX
DR   WPI; 2002-381255/41.
DR   N-PSDB; ABN90824.
XX
PT   Novel isolated nucleic acid encoding a Staphylococcus epidermis
PT   polypeptide, useful for diagnosing and treating bacterial infections.
XX
PS   Disclosure; SEQ ID NO 3124; 267pp; English.
XX
CC   ABN90538 to ABN93374 represent Staphylococcus epidermidis open reading
CC   frame (ORF) nucleic acid sequences which encode the amino acid sequences
CC   given in ABP35124 to ABP37960. The S. epidermidis sequences have
CC   antibacterial activity and can be used in gene therapy. The sequences can
CC   also be used in the diagnosis and treatment of bacterial infections,
CC   particularly S. epidermidis infections. The sequences can be used to
CC   screen for compounds able to interfere with the S. epidermidis life cycle
CC   or inhibit S. epidermidis infection. N.B. The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from the USPTO web site
XX
SQ   Sequence 297 AA;

  Query Match             100.0%;  Score 25;  DB 5;  Length 297;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         44 IQGFVRHI 51


RESULT 192
ABU23174
ID   ABU23174 standard; protein; 297 AA.
XX
AC   ABU23174;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #8701.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Bordetella pertussis.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Wang L,  Zamudio C,  Malone C,  Haselbeck R,  Ohlsen KL,  Zyskind JW;
PI   Wall D,  Trawick JD,  Carr GJ,  Yamamoto R,  Forsyth RA,  Xu HH;
XX
DR   WPI; 2003-029926/02.
DR   N-PSDB; ACA27044.
XX
PT   New antisense nucleic acids, useful for identifying proteins or screening
PT   for homologous nucleic acids required for cellular proliferation to
PT   isolate candidate molecules for rational drug discovery programs.
XX
PS   Claim 25; SEQ ID NO 51098; 1766pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising any one of
CC   the 6213 antisense sequences given in the specification where expression
CC   of the nucleic acid inhibits proliferation of a cell. Also included are:
CC   (1) a vector comprising a promoter operably linked to the nucleic acid
CC   encoding a polypeptide whose expression is inhibited by the antisense
CC   nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC   polypeptide or its fragment whose expression is inhibited by the
CC   antisense nucleic acid; (4) an antibody capable of specifically binding
CC   the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC   proliferation or the activity of a gene in an operon required for
CC   proliferation; (7) identifying a compound that influences the activity of
CC   the gene product or that has an activity against a biological pathway
CC   required for proliferation, or that inhibits cellular proliferation; (8)
CC   identifying a gene required for cellular proliferation or the biological
CC   pathway in which a proliferation-required gene or its gene product lies
CC   or a gene on which the test compound that inhibits proliferation of an
CC   organism acts; (9) manufacturing an antibiotic; (10) profiling a
CC   compound's activity; (11) a culture comprising strains in which the gene
CC   product is overexpressed or underexpressed; (12) determining the extent
CC   to which each of the strains is present in a culture or collection of
CC   strains; or (13) identifying the target of a compound that inhibits the
CC   proliferation of an organism. The antisense nucleic acids are useful for
CC   identifying proteins or screening for homologous nucleic acids required
CC   for cellular proliferation to isolate candidate molecules for rational
CC   drug discovery programs, or for screening homologous nucleic acids
CC   required for proliferation in cells other than S. aureus, S. typhimurium,
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CC   K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC   the target prokaryotic essential genes. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 297 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 297;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         92 RQHGVRHI 99


RESULT 193
AAU03198
ID   AAU03198 standard; protein; 298 AA.
XX
AC   AAU03198;
XX
DT   04-DEC-2001  (first entry)
XX
DE   Dynamin consensus amino acid sequence #2.
XX
KW   Human; 40322 dynamin; GTPase; clathrin-mediated endocytosis; brain;
KW   neurological disorder; immune disorder; inflammatory disorder;
KW   haematopoietic disorders; kidney disorder; lung disorder; gene therapy;
KW   liver disorder; heart disorder; hyperproliferative disorder;
KW   viral infection; cystic fibrosis; cytostatic; immunosuppressive;
KW   vasotropic; cardiant; anti inflammatory; anti HIV; anti arthritic.
XX
OS   Synthetic.
XX
FH   Key             Location/Qualifiers
FT   Region          1. .298
FT                   /note= "Corresponds to amino acids 216-509 of human 40322
FT                   dynamin (AAU03196)"
XX
PN   WO200164880-A2.
XX
PD   07-SEP-2001.
XX
PF   28-FEB-2001; 2001WO-US006511.
XX
PR   28-FEB-2000; 2000US-0185503P.
XX
PA   (MILL-) MILLENNIUM PHARM INC.
XX
PI   Meyers RA;
XX
DR   WPI; 2001-550180/61.
XX
PT   Novel human dynamin polypeptides and polynucleotides, useful for treating
PT   lung disorders, liver disorders, spleen disorders, brain disorders, colon
PT   disorders, immune disorders and heart disorders.
XX
PS   Disclosure; Fig 6A-B; 125pp; English.
XX
CC   The present invention relates to the isolation of a novel human dynamin,
CC   40322 dynamin and the nucleotide sequence encoding it. Dynamin, a GTPase,
CC   is involved in clathrin-mediated endocytosis and other intracellular
CC   trafficking events such as synaptic vesicle recycling. The 40322 dynamin
CC   and the polynucleotide sequence encoding it are useful for the diagnosis
CC   and treatment of dynamin-related disorders such as brain and neurological
CC   disorders (e.g. cerebral ischaemia, Huntington's disease), immune and
CC   inflammatory disorders involving the block of neuropeptide receptor
CC   endocytosis (e.g. opioid disorders), haematopoietic disorders, kidney
CC   disorders, lung disorders (e.g. pulmonary disease), liver disorders (e.g.
CC   cirrhosis), heart disorders (e.g. heart failure), hyperproliferative
CC   disorders (e.g. cancer) and infectious viral disorders. The
CC   polynucleotide sequence encoding 40322 dynamin can also be used in the
CC   gene therapy for the treatment of cystic fibrosis. AAU03197-AAU03199
CC   represent consensus amino acid sequences for dynamin which are compared
CC   to the the novel human 40322 dynamin
XX
SQ   Sequence 298 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 298;
  Best Local Similarity   50.0%;  Pred. No. 6.7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db         69 NQELVSHI 76


RESULT 194
ABU40108
ID   ABU40108 standard; protein; 300 AA.
XX
AC   ABU40108;
XX
DT   19-JUN-2003  (first entry)
XX
DE   Protein encoded by Prokaryotic essential gene #25635.
XX
KW   Antisense; prokaryotic essential gene; cell proliferation; drug design.
XX
OS   Pseudomonas putida.
XX
PN   WO200277183-A2.
XX
PD   03-OCT-2002.
XX
PF   21-MAR-2002; 2002WO-US009107.
XX
PR   21-MAR-2001; 2001US-00815242.
PR   06-SEP-2001; 2001US-00948993.
PR   25-OCT-2001; 2001US-0342923P.
PR   08-FEB-2002; 2002US-00072851.
PR   06-MAR-2002; 2002US-0362699P.
XX
PA   (ELIT-) ELITRA PHARM INC.
XX
PI   Wang L,  Zamudio C,  Malone C,  Haselbeck R,  Ohlsen KL,  Zyskind JW;
PI   Wall D,  Trawick JD,  Carr GJ,  Yamamoto R,  Forsyth RA,  Xu HH;
XX
DR   WPI; 2003-029926/02.
DR   N-PSDB; ACA43978.
XX
PT   New antisense nucleic acids, useful for identifying proteins or screening
PT   for homologous nucleic acids required for cellular proliferation to
PT   isolate candidate molecules for rational drug discovery programs.
XX
PS   Claim 25; SEQ ID NO 68032; 1766pp; English.
XX
CC   The invention relates to an isolated nucleic acid comprising any one of
CC   the 6213 antisense sequences given in the specification where expression
CC   of the nucleic acid inhibits proliferation of a cell. Also included are:
CC   (1) a vector comprising a promoter operably linked to the nucleic acid
CC   encoding a polypeptide whose expression is inhibited by the antisense
CC   nucleic acid; (2) a host cell containing the vector; (3) an isolated
CC   polypeptide or its fragment whose expression is inhibited by the
CC   antisense nucleic acid; (4) an antibody capable of specifically binding
CC   the polypeptide;(5) producing the polypeptide; (6) inhibiting cellular
CC   proliferation or the activity of a gene in an operon required for
CC   proliferation; (7) identifying a compound that influences the activity of
CC   the gene product or that has an activity against a biological pathway
CC   required for proliferation, or that inhibits cellular proliferation; (8)
CC   identifying a gene required for cellular proliferation or the biological
CC   pathway in which a proliferation-required gene or its gene product lies
CC   or a gene on which the test compound that inhibits proliferation of an
CC   organism acts; (9) manufacturing an antibiotic; (10) profiling a
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CC   compound's activity; (11) a culture comprising strains in which the gene
CC   product is overexpressed or underexpressed; (12) determining the extent
CC   to which each of the strains is present in a culture or collection of
CC   strains; or (13) identifying the target of a compound that inhibits the
CC   proliferation of an organism. The antisense nucleic acids are useful for
CC   identifying proteins or screening for homologous nucleic acids required
CC   for cellular proliferation to isolate candidate molecules for rational
CC   drug discovery programs, or for screening homologous nucleic acids
CC   required for proliferation in cells other than S. aureus, S. typhimurium,
CC   K. pneumoniae or P. aeruginosa. The present sequence is encoded by one of
CC   the target prokaryotic essential genes. Note: The sequence data for this
CC   patent did not form part of the printed specification, but was obtained
CC   in electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 300 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 300;
  Best Local Similarity   50.0%;  Pred. No. 6.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        224 QQGHVLHI 231


RESULT 195
ADC00079
ID   ADC00079 standard; protein; 303 AA.
XX
AC   ADC00079;
XX
DT   04-DEC-2003  (first entry)
XX
DE   Enterohaemorragic E. coli 0157:H7-specific protein SEQ ID NO: 124.
XX
KW   enterohaemorragic; anti-bacterial.
XX
OS   Escherichia coli; 0157:H7.
XX
PN   JP2002355074-A.
XX
PD   10-DEC-2002.
XX
PF   24-JAN-2002; 2002JP-00015959.
XX
PR   24-JAN-2001; 2001JP-00112010.
XX
PA   (UYTS-) UNIV TSUKUBA.
XX
DR   WPI; 2003-451640/43.
XX
PT   Enterohemorragic Escherichia coli O157:H7-specific nucleic acid molecule
PT   and a polypeptide and its use, a polypeptide, a vector and a host cell.
XX
PS   Claim 3; SEQ ID NO 124; 2067pp; Japanese.
XX
CC   The invention relates to a novel enterohaemorragic Escherichia coli
CC   O157:H7-specific nucleic acid molecule. A polynucleotide of the invention
CC   has anti-bacterial activity. The polypeptide can be used in detection
CC   and/or treatment of O157:H7 infection. The nucleotide sequence of the
CC   genome of Enterohaemorragic E coli O157:H7 was determined. The present
CC   sequence represents an E. coli 0157:H7-specific polypeptide of the
CC   invention.
XX
SQ   Sequence 303 AA;

  Query Match             100.0%;  Score 25;  DB 7;  Length 303;
  Best Local Similarity   50.0%;  Pred. No. 6.8e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        283 AQRCVNHI 290


RESULT 196
ADA11625
ID   ADA11625 standard; protein; 304 AA.
XX
AC   ADA11625;
XX
DT   06-NOV-2003  (first entry)
XX
DE   Human novel secreted protein, SEQ ID NO 153.
XX
KW   cancer; inflammation; immune disorder; neurological disorder;
KW   blood clotting disorder; food additive; food preservative;
KW   storage capability; fat content; nutritional component; human;
KW   secreted protein.
XX
OS   Homo sapiens.
XX
PN   US2003055236-A1.
XX
PD   20-MAR-2003.
XX
PF   14-MAR-2002; 2002US-00097065.
XX
PR   18-DEC-1997;   97US-0068006P.
PR   18-DEC-1997;   97US-0068007P.
PR   18-DEC-1997;   97US-0068008P.
PR   18-DEC-1997;   97US-0068053P.
PR   18-DEC-1997;   97US-0068054P.
PR   18-DEC-1997;   97US-0068057P.
PR   18-DEC-1997;   97US-0068064P.
PR   18-DEC-1997;   97US-0070923P.
PR   19-DEC-1997;   97US-0068169P.
PR   19-DEC-1997;   97US-0068365P.
PR   19-DEC-1997;   97US-0068367P.
PR   19-DEC-1997;   97US-0068368P.
PR   19-DEC-1997;   97US-0068369P.
PR   17-DEC-1998;   98WO-US027059.
PR   17-JUN-1999;   99US-00334595.
XX
PA   (HUMA-) HUMAN GENOME SCI INC.
XX
PI   Moore PA,  Ruben SM,  Carter KC,  Shi Y,  Rosen CA,  Soppet DR;
PI   Kyaw H,  Wei Y,  Florence KA,  Duan DR,  Florence C,  Greene JM,  Feng P;
PI   Ferrie AM,  Yu G,  Janat F,  Ni J;
XX
DR   WPI; 2003-567105/53.
DR   N-PSDB; ADA11501.
XX
PT   New secreted HKABT24 nucleic acid molecules and polypeptides, useful for
PT   preventing, treating, or ameliorating a medical condition, such as
PT   cancer, inflammation, immune disorders, neurological and blood clotting
PT   disorders.
XX
PS   Claim 11; SEQ ID NO 153; 118pp; English.
XX
CC   The invention relates to an isolated HKABT24 nucleic acid molecule. The
CC   polypeptides, nucleic acids and antibodies are useful for diagnosing a
CC   pathological condition or a susceptibility to a pathological condition,
CC   for preventing, treating, or ameliorating a medical condition, such as
CC   cancer, inflammation and other immune disorders, neurological and blood
CC   clotting disorders. The nucleic acids are also useful for chromosome
CC   identification, radiation hybrid mapping or long-range restriction
CC   mapping. The polypeptides and antibodies are useful for providing
CC   immunological probes for differential identification of the tissues
CC   immunohistochemistry assays. The polypeptide, polynucleotide, agonist or
CC   antagonist may also be used as a food additive or preservative to
CC   increase or decrease storage capabilities, fat content or other
CC   nutritional components. The present sequence represents the amino acid
CC   sequence of a novel human secreted protein. Note: The sequence data for
CC   this patent did not form part of the printed specification but was
```

```
CC   obtained in electronic format directly from USPTO at
CC   seqdata.uspto.gov.uk/sequence.html?DocID=20030055236.
XX
SQ   Sequence 304 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 304;
  Best Local Similarity   50.0%;  Pred. No. 6.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        199 LQITVGHI 206


RESULT 197
AAR97836
ID   AAR97836 standard; protein; 305 AA.
XX
AC   AAR97836;
XX
DT   27-AUG-2003  (revised)
DT   11-SEP-1996  (first entry)
XX
DE   Kaposi's sarcoma associated herpesvirus virion polypeptide VP23.
XX
KW   Kaposi's sarcoma; gamma-2 herpesvirus; KSHV; therapy; diagnosis; vaccine;
KW   diagnosis; AIDS; virion polypeptide VP23.
XX
OS   Human herpesvirus 8.
XX
FH   Key             Location/Qualifiers
FT   Region          260. .268
FT                   /note= "mitochondrial energy transfer motif"
XX
PN   WO9615779-A1.
XX
PD   30-MAY-1996.
XX
PF   21-NOV-1995;   95WO-US015138.
XX
PR   21-NOV-1994;   94US-00343101.
PR   11-APR-1995;   95US-00420235.
XX
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
XX
PI   Chang Y,  Moore PS;
XX
DR   WPI; 1996-268320/27.
DR   N-PSDB; AAT30688.
XX
PT   Herpes virus associated with Kaposi's sarcoma - also definitive DNA
PT   sequences, useful for diagnosis of and to develop prods. for treatment of
PT   Kaposi's sarcoma.
XX
PS   Claim 17; Page 213-215; 277pp; English.
XX
CC   Lambda clone KS5 (AAT30681) is a fragment of a newly identified human
CC   gamma-2 herpesvirus associated with Kaposi's sarcoma (KS). KS5 has 17
CC   open reading frames (AAT30682-98), 15 of which are complete, including
CC   ORF26 (AAT30688), which codes for virion polypeptide VP23 (AAR97836),
CC   identified by sequence homology to known herpesvirus sequences. The
CC   protein products (AAR97830-46, respectively) of the 17 ORFs can be
CC   expressed in eukaryotic or bacterial host cells for use as vaccines, for
CC   KS diagnosis, or for raising antibodies. (Updated on 27-AUG-2003 to
CC   correct OS field.)
XX
SQ   Sequence 305 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 305;
  Best Local Similarity   50.0%;  Pred. No. 6.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        150 QQLLVYHI 157


RESULT 198
AAR93612
ID   AAR93612 standard; protein; 305 AA.
XX
AC   AAR93612;
XX
DT   27-AUG-2003  (revised)
DT   25-MAR-2003  (revised)
DT   13-AUG-1996  (first entry)
XX
DE   Kaposi's sarcoma associated herpesvirus virion protein.
XX
KW   Kaposi's sarcoma; KSHV; lymphoma; AIDS; vaccine; diagnosis; therapy;
KW   virion protein.
XX
OS   Human herpesvirus 8.
XX
FH   Key             Location/Qualifiers
FT   Region          260. .268
FT                   /note= "mitochondrial energy transfer protein motif"
XX
PN   WO9606159-A1.
XX
PD   29-FEB-1996.
XX
PF   11-AUG-1995;   95WO-US010194.
XX
PR   18-AUG-1994;   94US-00292365.
PR   21-NOV-1994;   94US-00343101.
PR   11-APR-1995;   95US-00420235.
XX
PA   (UYCO ) UNIV COLUMBIA NEW YORK.
XX
PI   Chang Y,  Moore PS;
XX
DR   WPI; 1996-151362/15.
DR   N-PSDB; AAT16818.
XX
PT   Herpes:virus DNA associated with Kaposi's sarcoma - also associated
PT   vectors and proteins, used in detection and vaccination.
XX
PS   Claim 17; Page 226-228; 305pp; English.
XX
CC   Kaposi's sarcoma associated herpes virus (KSHV) clone KS5 (AAT16806),
CC   obtd. from a KS lesion genomic library, includes 15 complete ORFs and 2
CC   incomplete ORFs (AAT16807-23) named according to their herpesvirus
CC   saimiri positional homologues. The virion protein (AAR93612) is the
CC   product of ORF26 (AAT16818). KSHV proteins and peptides may be obtd. by
CC   incorporating encoding sequences into a vector and expression in host
CC   cells. They are useful in vaccines or for raising antibodies of
CC   diagnostic or therapeutic value. (Updated on 25-MAR-2003 to correct PR
CC   field.) (Updated on 27-AUG-2003 to correct OS field.)
XX
SQ   Sequence 305 AA;

  Query Match             100.0%;  Score 25;  DB 2;  Length 305;
  Best Local Similarity   50.0%;  Pred. No. 6.9e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
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Db        150 QQLLVYHI 157


RESULT 199
ABG29631
ID   ABG29631 standard; protein; 307 AA.
XX
AC   ABG29631;
```

```
XX
DT   18-FEB-2002  (first entry)
XX
DE   Novel human diagnostic protein #29622.
XX
KW   Human; chromosome mapping; gene mapping; gene therapy; forensic;
KW   food supplement; medical imaging; diagnostic; genetic disorder.
XX
OS   Homo sapiens.
XX
PN   WO200175067-A2.
XX
PD   11-OCT-2001.
XX
PF   30-MAR-2001; 2001WO-US008631.
XX
PR   31-MAR-2000; 2000US-00540217.
PR   23-AUG-2000; 2000US-00649167.
XX
PA   (HYSE-) HYSEQ INC.
XX
PI   Drmanac RT,  Liu C,  Tang YT;
XX
DR   WPI; 2001-639362/73.
DR   N-PSDB; AAS93818.
XX
PT   New isolated polynucleotide and encoded polypeptides, useful in
PT   diagnostics, forensics, gene mapping, identification of mutations
PT   responsible for genetic disorders or other traits and to assess
PT   biodiversity.
XX
PS   Claim 20; SEQ ID NO 59990; 103pp; English.
XX
CC   The invention relates to isolated polynucleotide (I) and polypeptide (II)
CC   sequences. (I) is useful as hybridisation probes, polymerase chain
CC   reaction (PCR) primers, oligomers, and for chromosome and gene mapping,
CC   and in recombinant production of (II). The polynucleotides are also used
CC   in diagnostics as expressed sequence tags for identifying expressed
CC   genes. (I) is useful in gene therapy techniques to restore normal
CC   activity of (II) or to treat disease states involving (II). (II) is
CC   useful for generating antibodies against it, detecting or quantitating a
CC   polypeptide in tissue, as molecular weight markers and as a food
CC   supplement. (II) and its binding partners are useful in medical imaging
CC   of sites expressing (II). (I) and (II) are useful for treating disorders
CC   involving aberrant protein expression or biological activity. The
CC   polypeptide and polynucleotide sequences have applications in
CC   diagnostics, forensics, gene mapping, identification of mutations
CC   responsible for genetic disorders or other traits to assess biodiversity
CC   and to produce other types of data and products dependent on DNA and
CC   amino acid sequences. ABG00010-ABG30377 represent novel human diagnostic
CC   amino acid sequences of the invention. Note: The sequence data for this
CC   patent did not appear in the printed specification, but was obtained in
CC   electronic format directly from WIPO at
CC   ftp.wipo.int/pub/published_pct_sequences
XX
SQ   Sequence 307 AA;

  Query Match             100.0%;  Score 25;  DB 4;  Length 307;
  Best Local Similarity   50.0%;  Pred. No. 7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        152 QQGLVKHI 159


RESULT 200
ABP77715
ID   ABP77715 standard; protein; 307 AA.
XX
AC   ABP77715;
XX
DT   07-MAR-2003  (first entry)
XX
DE   N. gonorrhoeae amino acid sequence SEQ ID 1960.
XX
KW   Antibacterial; infection; vaccine; gene therapy.
XX
OS   Neisseria gonorrhoeae.
XX
PN   WO200279243-A2.
XX
PD   10-OCT-2002.
XX
PF   12-FEB-2002; 2002WO-IB002069.
XX
PR   12-FEB-2001; 2001GB-00003424.
XX
PA   (CHIR-) CHIRON SPA.
XX
PI   Fontana MR,  Pizza M,  Masignani V,  Monaci E;
XX
DR   WPI; 2003-058415/05.
DR   N-PSDB; ABZ38685.
XX
PT   New protein from Neisseria gonorrheae, useful for the manufacture of a
PT   medicament for treating or preventing N. gonorrheae infection.
XX
PS   Disclosure; Page 330; 815pp; English.
XX
CC   The present invention relates to proteins from Neisseria gonorrhoeae.
CC   Also disclosed are the nucleic acid molecules encoding the proteins and
CC   antibodies that specifically bind to the proteins. The composition
CC   comprising the protein, nucleic acid or antibody is useful for the
CC   manufacture of a medicament for treating or preventing N. gonorrhoeae
CC   infection, this may be in the form of a vaccine or gene therapy.
CC   Sequences given in records ABP76736-ABP81046 represent nucleic acid
CC   molecules of the invention
XX
SQ   Sequence 307 AA;

  Query Match             100.0%;  Score 25;  DB 6;  Length 307;
  Best Local Similarity   50.0%;  Pred. No. 7e+03;
  Matches    4;  Conservative    4;  Mismatches    0;  Indels    0;  Gaps    0;

Qy          1 XQXXVXHI 8
              :|::|:||
Db        257 QQGFVLHI 264


Search completed: August 23, 2004, 11:10:50
Job time : 108 secs
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